

# Arithmetic practice sheets- Year 6

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<a href="#">Column addition- Questions 1, 19 and 31</a>	<a href="#">Adding fractions (mixed numbers)- Question 33</a>
<a href="#">Column subtraction- Questions 2, 18 and 32</a>	<a href="#">Subtracting fractions (mixed numbers)- Question 16</a>
<a href="#">Order of operations- Question 24</a>	<a href="#">Adding fractions- Question 33</a>
<a href="#">Percentages- Questions 23 and 27</a>	<a href="#">Subtracting fractions- Question 16</a>
<a href="#">Column addition (decimals)- Question 9</a>	<a href="#">Dividing fractions by whole numbers- Question 25</a>
<a href="#">Column subtraction (decimals)- Question 12</a>	<a href="#">Multiplying pairs of fractions- Question 25</a>
<a href="#">Divide by 10, 100 and 1000- Question 7</a>	<a href="#">Multiplying fractions by whole numbers- Question 22</a>
<a href="#">Use long division- Question 14 and 15</a>	<a href="#">Find fractions of whole numbers- Question 30</a>
<a href="#">Use long multiplication- Question 21 and 28</a>	<a href="#">Finding the whole from a fraction- Question 34</a>
<a href="#">Multiply by 10, 100 and 1000- Question 29</a>	<a href="#">Missing number questions (addition symbol)- Question 3</a>
<a href="#">Multiplying decimals- Question 17</a>	<a href="#">Missing number questions (subtraction symbol)- Question 4</a>
<a href="#">Use short division- Question 11</a>	<a href="#">Missing number questions (multiplication symbol)- Question 36</a>
<a href="#">Use short multiplication (with and without decimals)- Question 10</a>	<a href="#">Missing number questions (division symbol)- Question 35</a>
<a href="#">Square numbers- Question 8</a>	<a href="#">Using multiplication facts- Question 5</a>
<a href="#">Subtracting decimal number from whole number Question 20</a>	

## Use column addition

$$3 \ 4, \ 4 \ 5 \ 3 + 4, \ 5 \ 2 \ 7$$

TTH TH, H T O

$$\begin{array}{r} 4, \ 4 \ 5 \ 3 \\ + 4, \ 5 \ 2 \ 7 \\ \hline \end{array}$$

- 1) Align digits in the correct place value columns.

- 3) Starting from the right, add each column in turn.  
Carry digits to the next column if the total adds to more than 9.

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

0

Carry the 1 to the next column

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

8

1

Include the 1 in your next addition

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

3 8 9 8 0

1

## Questions 1, 19 and 31 (sheet 1)

1)  $40,354 + 67,667$

2)  $416,834 + 125,479$

3)  $9,773,113 + 8,359,696$

4)  $54,490 + 24,684$

5)  $636,454 + 384,677$

6)  $5,622,226 + 7,068,705$

7)  $33,484 + 14,664$

8)  $904,106 + 633,390$

## Use column addition

$$3 \ 4, \ 4 \ 5 \ 3 + 4, \ 5 \ 2 \ 7$$

TTH TH, H T O

$$\begin{array}{r} 4, \ 4 \ 5 \ 3 \\ + 4, \ 5 \ 2 \ 7 \\ \hline \end{array}$$

- 1) Align digits in the correct place value columns.

- 3) Starting from the right, add each column in turn.  
Carry digits to the next column if the total adds to more than 9.

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

0

Carry the 1 to the next column

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

8

1

Include the 1 in your next addition

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

3 8 9 8 0

1

## Questions 1, 19 and 31 (sheet 2)

1)  $8,899,612 + 5,818,451$

2)  $92,572 + 39,504$

3)  $578,700 + 984,997$

4)  $5,044,486 + 7,741,903$

5)  $47,536 + 13,023$

6)  $436,376 + 599,893$

7)  $5,089,500 + 1,315,771$

8)  $93,670 + 70,400$

## Use column addition

$$3 \ 4, \ 4 \ 5 \ 3 + 4, \ 5 \ 2 \ 7$$

TTH TH, H T O

$$\begin{array}{r} 4, \ 4 \ 5 \ 3 \\ + 4, \ 5 \ 2 \ 7 \\ \hline \end{array}$$

- 1) Align digits in the correct place value columns.

- 3) Starting from the right, add each column in turn.  
Carry digits to the next column if the total adds to more than 9.

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

0

Carry the 1 to the next column

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

3 8 9 8 0

1

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

8 0

1

Include the 1 in your next addition

## Questions 1, 19 and 31 (sheet 3)

1)  $91,454 + 79,931$

2)  $459,294 + 830,411$

3)  $6,890,428 + 1,801,558$

4)  $90,843 + 97,655$

5)  $738,535 + 347,254$

6)  $1,876,304 + 4,640,033$

7)  $72,474 + 72,588$

8)  $20,276,341 + 242,108$

## Use column addition

$$3 \ 4, \ 4 \ 5 \ 3 + 4, \ 5 \ 2 \ 7$$

TTH TH, H T O

$$\begin{array}{r} 4, \ 4 \ 5 \ 3 \\ + 4, \ 5 \ 2 \ 7 \\ \hline \end{array}$$

- 1) Align digits in the correct place value columns.

- 3) Starting from the right, add each column in turn.  
Carry digits to the next column if the total adds to more than 9.

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

0

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

8

1

Carry the 1 to the next column

TTH TH, H T O

$$4, \ 4 \ 5 \ 3 +$$

$$4, \ 5 \ 2 \ 7$$

3 8 9 8 0

1

1

Include the 1 in your next addition

## Questions 1, 19 and 31 (sheet 4)

1)  $6,130,100 + 7,953,669$

2)  $76,742 + 71,817$

3)  $488,290 + 173,624$

4)  $6,241,067 + 6,912,765$

5)  $41,473 + 59,778$

6)  $981,250 + 596,244$

7)  $4,726,648 + 7,706,140$

8)  $20,036 + 82,062$

Use column addition- Questions 1, 19 and 31 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 108,021	1) 14,718,063	1) 171,385	1) 14,083,769
2) 542,313	2) 132,076	2) 1,289,705	2) 148,559
3) 18,132,809	3) 1,563,697	3) 8,610,986	3) 661,914
4) 79,174	4) 12,786,389	4) 188,498	4) 13,153,832
5) 1,021,131	5) 60,559	5) 1,085,789	5) 101,251
6) 12,690,931	6) 1,036,269	6) 6,516,337	6) 1,577,494
7) 48,148	7) 6,405,271	7) 145,062	7) 12,432,788
8) 1,537,496	8) 164,070	8) 518,449	8) 102,098

## Use column subtraction

$$3\ 4,\ 6\ 5\ 3 - 4,\ 5\ 2\ 7$$

TTH TH, H T 0

$$\begin{array}{r} 3\ 4,\ 6\ 5\ 3 \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

1) Align digits in the correct place value columns.

3) Starting from the right, subtract each column in turn.

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \cancel{3}\ 1 \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

3 subtract 7 would give us a negative number, so we regroup

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \cancel{3}\ 1 \\ - 4,\ 5\ 2\ 7 \\ \hline 3\ 0\ 1\ 2\ 6 \end{array}$$

Exchange one lot of 10, so we now have 13—7.

## Questions 2, 18 and 32(sheet 1)

1)  $578,748 - 284,073$

2)  $676,425 - 328,229$

3)  $807,725 + 394,804$

4)  $700,249 - 600,682$

5)  $717,227 - 126,675$

6)  $939,259 - 791,566$

7)  $752,218 - 118,341$

8)  $740,451 - 567,597$

## Use column subtraction

$$3\ 4,\ 6\ 5\ 3 - 4,\ 5\ 2\ 7$$

TTH TH, H T 0

$$\begin{array}{r} 3\ 4,\ 6\ 5\ 3 \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

1) Align digits in the correct place value columns.

3) Starting from the right, subtract each column in turn.

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \cancel{3} \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

3 subtract 7 would give us a negative number, so we regroup

Exchange one lot of 10, so we now have 13—7.

$$\begin{array}{r} 3\ \textcolor{magenta}{4},\ \textcolor{blue}{6}\ \cancel{5}\ \cancel{3} \\ - \textcolor{magenta}{4},\ \textcolor{blue}{5}\ \textcolor{green}{2}\ 7 \\ \hline 3\ \textcolor{magenta}{0}\ \textcolor{blue}{1}\ \textcolor{green}{2}\ 6 \end{array}$$

## Questions 2, 18 and 32 (sheet 2)

1)  $726,028 - 385,748$

2)  $503,862 - 133,860$

3)  $390,814 - 301,362$

4)  $860,108 - 131,122$

5)  $710,112 - 119,717$

6)  $230,041 - 130,274$

7)  $483,737 - 425,241$

8)  $976,695 - 423,662$

## Use column subtraction

$$3\ 4,\ 6\ 5\ 3 - 4,\ 5\ 2\ 7$$

TTH TH, H T 0

$$\begin{array}{r} 3\ 4,\ 6\ 5\ 3 \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

1) Align digits in the correct place value columns.

3) Starting from the right, subtract each column in turn.

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \overset{4}{\cancel{3}}\ \overset{1}{-} \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

3 subtract 7 would give us a negative number, so we regroup

Exchange one lot of 10, so we now have 13—7.

$$\begin{array}{r} 3\ \textcolor{magenta}{4},\ \textcolor{blue}{6}\ \cancel{5}\ \overset{4}{\cancel{3}}\ \overset{1}{-} \\ - \textcolor{magenta}{4},\ \textcolor{blue}{5}\ \textcolor{green}{2}\ 7 \\ \hline \textcolor{magenta}{3}\ \textcolor{blue}{0}\ \textcolor{teal}{1}\ \textcolor{green}{2}\ 6 \end{array}$$

## Questions 2, 18 and 32 (sheet 3)

1)  $916,152 - 374,676$

2)  $698,156 - 658,793$

3)  $218,010 - 161,028$

4)  $576,202 - 359,392$

5)  $968,317 - 498,191$

6)  $334,059 - 203,509$

7)  $822,014 - 414,905$

8)  $683,763 - 232,310$

## Use column subtraction

$$3\ 4,\ 6\ 5\ 3 - 4,\ 5\ 2\ 7$$

TTH TH, H T 0

$$\begin{array}{r} 3\ 4,\ 6\ 5\ 3 \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

1) Align digits in the correct place value columns.

3) Starting from the right, subtract each column in turn.

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \cancel{3} \\ - 4,\ 5\ 2\ 7 \\ \hline \end{array}$$

3 subtract 7 would give us a negative number, so we regroup

Exchange one lot of 10, so we now have 13—7.

$$\begin{array}{r} 3\ 4,\ 6\ \cancel{5}\ \cancel{3} \\ - 4,\ 5\ 2\ 7 \\ \hline 3\ 0\ 1\ 2\ 6 \end{array}$$

## Questions 2, 18 and 32 (sheet 4)

1)  $802,842 - 149,051$

2)  $507,533 - 193,355$

3)  $920,739 - 193,355$

4)  $536,404 - 409,868$

5)  $656,505 - 592,801$

6)  $551,138 - 549,352$

7)  $358,029 - 167,248$

8)  $597,206 - 310,899$

Use column subtraction- Questions 2, 18 and 32 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 294,675	1) 840,280	1) 541,476	1) 653,791
2) 348,196	2) 370,002	2) 39,363	2) 314,178
3) 412,921	3) 89,452	3) 56,982	3) 16,322
4) 99,567	4) 728,986	4) 216,810	4) 126,536
5) 590,552	5) 590,395	5) 470,126	5) 63,704
6) 147,693	6) 99,767	6) 130,550	6) 1,786
7) 633,877	7) 58,496	7) 407,109	7) 190,781
8) 172,854	8) 553,033	8) 451,453	8) 286,307

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## Use the order of operations

B rackets

O rder (square/ cubes)

D ivision M ultipli cation

A ddition S ubtraction

$$3^3 - 3 \times (3 + 2)$$

$$3^3 - 3 \times 5$$

1) Complete any calculations in brackets.

$$2^2 - 3 \times 5$$

2) Complete any square or cube number calculations

$$2 \times 7 - 1 \times 5$$

3) Complete any multiplication or division (going from left to right)

$$2 \times 7 - 1 \times 5 = 12$$

4) Complete any addition or subtraction (going from left to right)

## Question 24 (sheet 1)

$$1) 6 + 4 \times 2$$

$$2) 4 + 4 \div 2$$

$$3) 8 + 6 - 3$$

$$4) 5 + 5 \times 4$$

$$5) 12 + 3 \times 2$$

$$6) 2 \times 4 + 5$$

$$7) 100 - (20 \times 3)$$

$$8) (35 - 15) + (27 - 7)$$

## Use the order of operations

B rackets

O rder (square/ cubes)

D ivision M ultipli cation

A ddition S ubtraction

$$3^3 - 3 \times (3 + 2)$$

$$3^3 - 3 \times 5$$

1) Complete any calculations in brackets.

$$2^2 - 3 \times 5$$

2) Complete any square or cube number calculations

$$2 \times 7 - 1 \times 5$$

3) Complete any multiplication or division (going from left to right)

$$2 \times 7 - 1 \times 5 = 12$$

4) Complete any addition or subtraction (going from left to right)

## Question 24 (sheet 2)

$$1) 15 + (6 \times 6)$$

$$2) (4 + 5) \times (3 + 6)$$

$$3) (5 + 5) \times (5 - 2)$$

$$4) 50 - (6 \times 6)$$

$$5) (4 + 8) \times (3 - 2)$$

$$6) (9 - 3) + (6 \times 6)$$

$$7) (5 \times 7) - (2 \times 5)$$

$$8) 56 - (4 \times 7)$$

## Use the order of operations

B rackets

O rder (square/ cubes)

D ivision M ultipli cation

A ddition S ubtraction

$$3^3 - 3 \times (3 + 2)$$

$$3^3 - 3 \times 5$$

1) Complete any calculations in brackets.

$$2^2 - 3 \times 5$$

2) Complete any square or cube number calculations

$$2 \times 7 - 1 \times 5$$

3) Complete any multiplication or division (going from left to right)

$$2 \times 7 - 1 \times 5 = 1$$

4) Complete any addition or subtraction (going from left to right)

## Question 24 (sheet 3)

$$1) 78 - (10 \times 7)$$

$$2) (7 \times 7) + (4 \times 8)$$

$$3) (45 - 23) + (5 \times 8)$$

$$4) 38 - (5 \times 7)$$

$$5) (100 - 45) + (7 \times 7)$$

$$6) 45 - (9 \times 4)$$

$$7) (4 \times 2) + (3 \times 3)$$

$$8) (6 \times 6) - (4 \times 4)$$

## Use the order of operations

B rackets

O rder (square/ cubes)

D ivision M ultipli cation

A ddition S ubtraction

$$3^3 - 3 \times (3 + 2)$$

$$3^3 - 3 \times 5$$

1) Complete any calculations in brackets.

$$2^2 - 3 \times 5$$

2) Complete any square or cube number calculations

$$2 \times 7 - 1 \times 5$$

3) Complete any multiplication or division (going from left to right)

$$2 \times 7 - 1 \times 5 = 12$$

4) Complete any addition or subtraction (going from left to right)

## Question 24 (sheet 4)

$$1) 18 - (4 \times 2)$$

$$2) 18 - (9 \times 4) + 32$$

$$3) 30 - (5 \times 4)$$

$$4) (8 + 6) \times 4$$

$$5) (4 \times 9) - (4 \times 8)$$

$$6) 72 - (8 \times 7) + 9$$

$$7) (4 \times 4) + (5 \times 5)$$

$$8) (9 \times 9) - (8 \times 8)$$

## Use the order of operations- Question 24 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 14	1) 51	1) 8	1) 10
2) 6	2) 81	2) 81	2) 14
3) 11	3) 30	3) 62	3) 10
4) 25	4) 14	4) 3	4) 56
5) 18	5) 12	5) 104	5) 4
6) 13	6) 42	6) 9	6) 25
7) 40	7) 25	7) 17	7) 41
8) 40	8) 28	8) 20	8) 17

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## Calculate percentages

Remember: 'per cent' means 'out of 100'

50% = divide by 2

25% = divide by 4

75% = divide by 4, then multiply by 3

10% = divide by 10

5% = divide by 10, then divide by 2

1% = divide by 100

For all other multiples of 10%, divide by 10 to find 10%, then multiply by the first digit.

30% = divide by 10, then multiply by 3

40% = divide by 10, then multiply by 4

70% = divide by 10, then multiply by 7

For all other percentages, divide by 100 to find 1%, then multiply by the percentage.

35% = divide by 100, then multiply by 35

48% = divide by 100, then multiply by 48

79% = divide by 100, then multiply by 79

## Questions 23 and 27 (sheet 1)

1) 50% of 300

2) 5% of 20

3) 2% of 150

4) 80% of 40

5) 75% of 132

6) 45% of 800

7) 23% of 250

8) 30% of 620

## Calculate percentages

Remember: 'per cent' means 'out of 100'

50% = divide by 2

25% = divide by 4

75% = divide by 4, then multiply by 3

10% = divide by 10

5% = divide by 10, then divide by 2

1% = divide by 100

For all other multiples of 10%, divide by 10 to find 10%, then multiply by the first digit.

30% = divide by 10, then multiply by 3

40% = divide by 10, then multiply by 4

70% = divide by 10, then multiply by 7

For all other percentages, divide by 100 to find 1%, then multiply by the percentage.

35% = divide by 100, then multiply by 35

48% = divide by 100, then multiply by 48

79% = divide by 100, then multiply by 79

## Questions 23 and 27 (sheet 2)

1) 25% of 52

2) 15% of 320

3) 7% of 150

4) 90% of 160

5) 50% of 724

6) 85% of 240

7) 41% of 900

8) 70% of 20

## Calculate percentages

Remember: 'per cent' means 'out of 100'

50% = divide by 2

25% = divide by 4

75% = divide by 4, then multiply by 3

10% = divide by 10

5% = divide by 10, then divide by 2

1% = divide by 100

For all other multiples of 10%, divide by 10 to find 10%, then multiply by the first digit.

30% = divide by 10, then multiply by 3

40% = divide by 10, then multiply by 4

70% = divide by 10, then multiply by 7

For all other percentages, divide by 100 to find 1%, then multiply by the percentage.

35% = divide by 100, then multiply by 35

48% = divide by 100, then multiply by 48

79% = divide by 100, then multiply by 79

## Questions 23 and 27 (sheet 3)

1) 25% of 244

2) 25% of 244

3) 95% of 190

4) 68% of 700

5) 40% of 190

6) 75% of 220

7) 85% of 640

8) 76% of 450

## Calculate percentages

Remember: 'per cent' means 'out of 100'

50% = divide by 2

25% = divide by 4

75% = divide by 4, then multiply by 3

10% = divide by 10

5% = divide by 10, then divide by 2

1% = divide by 100

For all other multiples of 10%, divide by 10 to find 10%, then multiply by the first digit.

30% = divide by 10, then multiply by 3

40% = divide by 10, then multiply by 4

70% = divide by 10, then multiply by 7

For all other percentages, divide by 100 to find 1%, then multiply by the percentage.

35% = divide by 100, then multiply by 35

48% = divide by 100, then multiply by 48

79% = divide by 100, then multiply by 79

## Questions 23 and 27 (sheet 4)

1) 75% of 540

2) 35% of 229

3) 4% of 160

4) 60% of 820

5) 50% of 175

6) 15% of 920

7) 57% of 66

8) 72% of 57

Calculate percentages- Question 23 and 27 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 150	1) 13	1) 61	1) 405
2) 1	2) 48	2) 180.5	2) 77
3) 3	3) 10.5	3) 476	3) 6.4
4) 32	4) 144	4) 76	4) 492
5) 99	5) 362	5) 165	5) 87.5
6) 360	6) 204	6) 544	6) 138
7) 57.5	7) 369	7) 342	7) 37.62
8) 186	8) 14	8) 196	8) 41.04

## Use column addition (decimals)

$$3 \ 2 . 7 + 4 . 3 \ 7$$

T O.t h

$$\begin{array}{r} 3 \ 2 . 7 \\ + 0 \ 4 . 3 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, add each column in turn. Carry digits to the next column if the total adds to more than 9.

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

Carry the 1 to the next column

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 7 . 0 \ 7 \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 3 \ 7 . 0 \ 7 \end{array}$$

Include the 1 in your next addition

## Question 9 (sheet 1)

1)  $28.2 + 93.5$

2)  $94.6 + 37.2$

3)  $82.6 + 23.6$

4)  $48.7 + 39.8$

5)  $50.9 + 39.4$

6)  $72.8 + 37.4$

7)  $382.6 + 126.5$

8)  $128.2 + 340$

## Use column addition (decimals)

$$3 \ 2 . 7 + 4 . 3 \ 7$$

T O.t h

$$\begin{array}{r} 3 \ 2 . 7 \\ + 0 \ 4 . 3 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, add each column in turn. Carry digits to the next column if the total adds to more than 9.

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

Carry the 1 to the next column

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 7 . 0 \ 7 \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 3 \ 7 . 0 \ 7 \end{array}$$

Include the 1 in your next addition

## Question 9 (sheet 2)

1)  $385.6 + 297.9$

2)  $670.7 + 185$

3)  $139.7 + 382.6$

4)  $738.2 + 582.5$

5)  $462.8 + 731.2$

6)  $838.0 + 542.7$

7)  $363 + 80.5$

8)  $68.4 + 29.8 + 55.3$

## Use column addition (decimals)

$$3 \ 2 . 7 + 4 . 3 \ 7$$

T O.t h

$$\begin{array}{r} 3 \ 2 . 7 \\ + 0 \ 4 . 3 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, add each column in turn. Carry digits to the next column if the total adds to more than 9.

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

Carry the 1 to the next column

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 7 . 0 \ 7 \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 3 \ 7 . 0 \ 7 \end{array}$$

Include the 1 in your next addition

## Question 9 (sheet 3)

1)  $3.44 + 9.3$

2)  $3.86 + 4.32$

3)  $2.23 + 2.2$

4)  $8.84 + 1.19$

5)  $3.89 + 8.81$

6)  $4.86 + 3.74$

7)  $2.77 + 6.87$

8)  $3.76 + 3.38$

## Use column addition (decimals)

$$3 \ 2 . 7 + 4 . 3 \ 7$$

T O.t h

$$\begin{array}{r} 3 \ 2 . 7 \\ + 0 \ 4 . 3 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, add each column in turn. Carry digits to the next column if the total adds to more than 9.

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline \end{array}$$

Carry the 1 to the next column

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 7 . 0 \ 7 \end{array}$$

$$\begin{array}{r} 3 \ 2 . 7 \ 0 \\ + 0 \ 4 . 3 \ 7 \\ \hline 3 \ 7 . 0 \ 7 \end{array}$$

Include the 1 in your next addition

## Question 9 (sheet 4)

1)  $0.87 + 0.82$

2)  $0.28 + 0.4$

3)  $0.31 + 0.71$

4)  $0.99 + 0.86$

5)  $0.29 + 0.08$

6)  $0.81 + 0.4$

7)  $0.58 + 0.02$

8)  $0.41 + 0.17$

## Use column addition (decimals)- Question 9 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 121.7	1) 683.5	1) 12.74	1) 1.69
2) 131.8	2) 855.7	2) 8.18	2) 0.68
3) 106.2	3) 522.3	3) 4.43	3) 1.02
4) 88.5	4) 1320.7	4) 10.03	4) 1.85
5) 90.3	5) 1194	5) 12.7	5) 0.37
6) 110.2	6) 1380.7	6) 8.6	6) 1.21
7) 509.1	7) 443.5	7) 9.64	7) 0.6
8) 468.2	8) 153.5	8) 7.14	8) 0.58

## Use column subtraction (decimals)

$$1 \ 8 . 9 - 2 . 8 \ 2$$

T O.t h

$$\begin{array}{r} 1 \ 8 . 9 \ 0 \\ + 0 \ 2 . 8 \ 2 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeroes as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, borrow from the next column.

$$\begin{array}{r} 1 \ 8 . 8 \cancel{9} \ 1 \ 0 \\ - 0 \ 2 . 8 \ 2 \\ \hline . \ 8 \end{array}$$

Borrow from the tenths digit

$$\begin{array}{r} 1 \ 8 \ 8 \cancel{9} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 6 . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 1 \ 6 . \ 0 \ 8 \end{array}$$

## Question 12 (sheet 1)

1)  $12.45 - 2.4$

2)  $6.402 - 4.5$

3)  $49.4 - 2.302$

4)  $39.403 - 4.49$

5)  $3.493 - 2.3$

6)  $4.303 - 2.34$

7)  $23.44 - 4.435$

8)  $9.594 - 3.4$

## Use column subtraction (decimals)

$$1 \ 8 . 9 - 2 . 8 \ 2$$

T O.t h

$$\begin{array}{r} 1 \ 8 . 9 \ 0 \\ + 0 \ 2 . 8 \ 2 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeroes as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, borrow from the next column.

$$\begin{array}{r} 1 \ 8 . 8 \cancel{9} \ 1 \ 0 \\ - 0 \ 2 . 8 \ 2 \\ \hline . \ 8 \end{array}$$

Borrow from the tenths digit

$$\begin{array}{r} 1 \ 8 \ 8 \cancel{9} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . 8 \ 2 \\ \hline 6 . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 1 \ 6 . \ 0 \ 8 \end{array}$$

## Question 12 (sheet 2)

1)  $0.5 - 0.03$

2)  $5.3 - 0.003$

3)  $44.32 - 4.5$

4)  $94.392 - 8.34$

5)  $7.8 - 5.64$

6)  $59.43 - 4.532$

7)  $0.8 - 0.43$

8)  $3.493 - 0.94$

## Use column subtraction (decimals)

$$1 \ 8 . 9 - 2 . 8 \ 2$$

T O.t h

$$\begin{array}{r} 1 \ 8 . 9 \ 0 \\ + 0 \ 2 . 8 \ 2 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeroes as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, borrow from the next column.

$$\begin{array}{r} 1 \ 8 . 8 \cancel{9} \ 1 \ 0 \\ - 0 \ 2 . 8 \ 2 \\ \hline . \ 8 \end{array}$$

Borrow from the tenths digit

$$\begin{array}{r} 1 \ 8 \ 8 \cancel{9} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 6 . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 1 \ 6 . \ 0 \ 8 \end{array}$$

## Question 12 (sheet 3)

1)  $1.4 - 0.04$

2)  $94.32 - 4.542$

3)  $5.3 - 3.21$

4)  $5.1 - 0.3$

5)  $2.4 - 0.03$

6)  $4.56 - 0.332$

7)  $9.79 - 3.464$

8)  $4.3 - 4.132$

## Use column subtraction (decimals)

$$1 \ 8 . 9 - 2 . 8 \ 2$$

T O.t h

$$\begin{array}{r} 1 \ 8 . 9 \ 0 \\ + 0 \ 2 . 8 \ 2 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeroes as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, borrow from the next column.

$$\begin{array}{r} 1 \ 8 . 8 \cancel{9} \ 1 \ 0 \\ - 0 \ 2 . 8 \ 2 \\ \hline . \ 8 \end{array}$$

Borrow from the tenths digit

$$\begin{array}{r} 1 \ 8 \ 8 \cancel{9} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 6 . \ 0 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \cancel{8} \ 0 \\ - 0 \ 2 . \ 8 \ 2 \\ \hline 1 \ 6 . \ 0 \ 8 \end{array}$$

## Question 12 (sheet 4)

1)  $11.4 - 5.53$

2)  $5.3 - 0.324$

3)  $50.43 - 3.54$

4)  $4.32 - 3.42$

5)  $4.5 - 3.65$

6)  $5.43 - 4.764$

7)  $3.5 - 3.276$

8)  $4.6. - 3.78$

## Use column subtraction (decimals)- Question 12 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 10.05	1) 0.47	1) 1.36	1) 5.87
2) 1.902	2) 5.297	2) 89.778	2) 4.976
3) 47.098	3) 39.82	3) 2.09	3) 46.89
4) 34.913	4) 86.052	4) 4.8	4) 0.9
5) 1.193	5) 2.16	5) 2.37	5) 0.85
6) 1.963	6) 54.898	6) 4.228	6) 0.666
7) 19.005	7) 0.37	7) 6.326	7) 0.224
8) 6.194	8) 2.553	8) 0.168	8) 0.82

## Divide by 10, 100 and 1000

4 5 7 ÷ 1 0  
Th H T 0.t h th

Makes the number 10 times smaller.  
Move each digit one place to the right.

4 5 7 ÷ 1 0 0  
Th H T 0.t h th

Makes the number 100 times smaller.  
Move each digit two places to the right.

4 5 7 ÷ 1 0 0 0  
Th H T 0.t h th

Makes the number 1000 times smaller.  
Move each digit three places to the right.

- 1) Lay out the number
- 2) Work out the number of places the digits need to move.
- 3) Move each digit, adding in zeros as placeholders.

## Question 7 (sheet 1)

1)  $4.3 \div 1000$

2)  $0.9 \div 1000$

3)  $3.1 \div 10$

4)  $4.2 \div 10$

5)  $7.3 \div 10$

6)  $6.7 \div 10$

7)  $4.6 \div 100$

8)  $8.1 \div 10$

## Divide by 10, 100 and 1000

$4 \ 5 \ 7 \div 1 \ 0$

**Th H T 0.t h th**

Makes the number 10 times smaller.  
Move each digit one place to the right.

$4 \ 5 \ 7 \div 1 \ 0 \ 0$

**Th H T 0.t h th**

Makes the number 100 times smaller.  
Move each digit two places to the right.

$4 \ 5 \ 7 \div 1 \ 0 \ 0 \ 0$

**Th H T 0.t h th**

Makes the number 1000 times smaller.  
Move each digit three places to the right.

- 1) Lay out the number
- 2) Work out the number of places the digits need to move.
- 3) Move each digit, adding in zeros as placeholders.

## Question 7 (sheet 2)

1)  $4.3 \div 100$

2)  $2.9 \div 1000$

3)  $6.4 \div 100$

4)  $8.6 \div 1000$

5)  $4.2 \div 100$

6)  $2.6 \div 100$

7)  $3.6 \div 100$

8)  $9.5 \div 100$

## Divide by 10, 100 and 1000

4 5 7 ÷ 1 0  
Th H T 0.t h th

Makes the number 10 times smaller.  
Move each digit one place to the right.

4 5 7 ÷ 1 0 0  
Th H T 0.t h th

Makes the number 100 times smaller.  
Move each digit two places to the right.

4 5 7 ÷ 1 0 0 0  
Th H T 0.t h th

Makes the number 1000 times smaller.  
Move each digit three places to the right.

- 1) Lay out the number
- 2) Work out the number of places the digits need to move.
- 3) Move each digit, adding in zeros as placeholders.

## Question 7 (sheet 3)

1)  $8.9 \div 1000$

2)  $2.9 \div 100$

3)  $1.1 \div 100$

4)  $4.7 \div 100$

5)  $4.0 \div 1000$

6)  $6.4 \div 1000$

7)  $7.5 \div 1000$

8)  $8.7 \div 1000$

## Divide by 10, 100 and 1000

4 5 7 ÷ 1 0  
Th H T 0.t h th

Makes the number 10 times smaller.  
Move each digit one place to the right.

4 5 7 ÷ 1 0 0  
Th H T 0.t h th

Makes the number 100 times smaller.  
Move each digit two places to the right.

4 5 7 ÷ 1 0 0 0  
Th H T 0.t h th

Makes the number 1000 times smaller.  
Move each digit three places to the right.

- 1) Lay out the number
- 2) Work out the number of places the digits need to move.
- 3) Move each digit, adding in zeros as placeholders.

## Question 7 (sheet 4)

- 1)  $0.8 \div 10$
- 2)  $6.6 \div 1000$
- 3)  $2.2 \div 1000$
- 4)  $4.8 \div 100$
- 5)  $9.0 \div 1000$
- 6)  $0.3 \div 1000$
- 7)  $6.3 \div 10$
- 8)  $1.5 \div 1000$

Divide by 10, 100 and 1000-Question 17 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 0.0043	1) 0.043	1) 0.0089	1) 0.08
2) 0.0009	2) 0.0029	2) 0.029	2) 0.0066
3) 0.31	3) 0.064	3) 0.011	3) 0.0022
4) 0.42	4) 0.0086	4) 0.047	4) 0.048
5) 0.73	5) 0.042	5) 0.04	5) 0.009
6) 0.67	6) 0.026	6) 0.0064	6) 0.0003
7) 0.046	7) 0.036	7) 0.0075	7) 0.63
8) 0.81	8) 0.095	8) 0.0087	8) 0.015

### Use long division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 =$$

$$\begin{array}{r}
 & 1 & 4 & 7 & 2 \\
 2 & \overline{)1} & 4 & 7 & 2 \\
 & 1 & 1 & 5 & 0 \\
 \hline
 & 0 & 3 & 2 & 2 \\
 & 2 & 3 & 0 \\
 \hline
 & 0 & 9 & 2 \\
 & 9 & 2 \\
 \hline
 & 0 & 0
 \end{array}$$

1) Lay out the calculation  
 2) Subtract a “chunk” (a multiple of the dividend)  
 $23 \times 50 = 1150$

5) Add up how many “chunks” you have subtracted.  $50 + 10 + 4$

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 = 6 \ 4$$

### Question 14 and 15 (sheet 1)

1)  $364 \div 14$

2)  $357 \div 21$

3)  $627 \div 33$

4)  $625 \div 25$

5)  $510 \div 17$

6)  $816 \div 24$

7)  $588 \div 42$

8)  $324 \div 18$

### Use long division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 =$$

$$\begin{array}{r}
 & 1 & 4 & 7 & 2 \\
 2 & \overline{)1} & 4 & 7 & 2 \\
 & 1 & 1 & 5 & 0 \\
 \hline
 & 0 & 3 & 2 & 2 \\
 & 2 & 3 & 0 \\
 \hline
 & 0 & 9 & 2 \\
 & 9 & 2 \\
 \hline
 & 0 & 0
 \end{array}$$

1) Lay out the calculation  
 2) Subtract a “chunk” (a multiple of the dividend)  
 $23 \times 50 = 1150$

5) Add up how many “chunks” you have subtracted.  $50 + 10 + 4$

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 = 6 \ 4$$

### Question 14 and 15 (sheet 2)

1)  $4215 \div 15$

2)  $3168 \div 24$

3)  $1333 \div 43$

4)  $6214 \div 26$

5)  $1715 \div 35$

6)  $8218 \div 14$

7)  $2665 \div 51$

8)  $5550 \div 37$

### Use long division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 =$$

$$\begin{array}{r}
 & 1 & 4 & 7 & 2 \\
 2 & \overline{)1} & 4 & 7 & 2 \\
 & 1 & 1 & 5 & 0 \\
 \hline
 & 0 & 3 & 2 & 2 \\
 & 2 & 3 & 0 \\
 \hline
 & 0 & 9 & 2 \\
 & 9 & 2 \\
 \hline
 & 0 & 0
 \end{array}$$

1) Lay out the calculation  
 2) Subtract a “chunk” (a multiple of the dividend)  
 $23 \times 50 = 1150$

5) Add up how many “chunks” you have subtracted.  $50 + 10 + 4$

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 = 6 \ 4$$

### Question 14 and 15 (sheet 3)

1)  $1088 \div 68$

2)  $1152 \div 12$

3)  $2106 \div 26$

4)  $4214 \div 86$

5)  $6528 \div 96$

6)  $3.952 \div 52$

7)  $7224 \div 24$

8)  $220 \div 20$

### Use long division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 =$$

$$\begin{array}{r}
 & 1 & 4 & 7 & 2 \\
 2 & \overline{)1} & 4 & 7 & 2 \\
 & 1 & 1 & 5 & 0 \\
 \hline
 & 0 & 3 & 2 & 2 \\
 & 2 & 3 & 0 \\
 \hline
 & 0 & 9 & 2 \\
 & 9 & 2 \\
 \hline
 & 0 & 0
 \end{array}$$

1) Lay out the calculation  
 2) Subtract a “chunk” (a multiple of the dividend)  
 $23 \times 50 = 1150$

5) Add up how many “chunks” you have subtracted.  $50 + 10 + 4$

$$1 \ 4 \ 7 \ 2 \div 2 \ 3 = 6 \ 4$$

### Question 14 and 15 (sheet 4)

1)  $966 \div 14$

2)  $3444 \div 41$

3)  $1780 \div 20$

4)  $1425 \div 19$

5)  $975 \div 15$

6)  $1368 \div 38$

7)  $1476 \div 36$

8)  $3082 \div 46$

Use long division- Questions 14 and 15 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 26	1) 281	1) 16	1) 14
2) 17	2) 132	2) 96	2) 41
3) 19	3) 31	3) 81	3) 20
4) 25	4) 239	4) 49	4) 19
5) 30	5) 49	5) 68	5) 15
6) 34	6) 587	6) 76	6) 38
7) 14	7) 65	7) 301	7) 41
8) 18	8) 150	8) 11	8) 67

## Use long multiplication

$$\begin{array}{r} 3 \ 2 \\ \times 4 \ 5 \\ \hline \end{array}$$

1) Multiply the top ones digit by the bottom ones.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 0 \end{array}$$

2) Multiply the top tens digit by the bottom ones.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

3) Add a zero below the ones digits.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

This shows that you are multiplying by 40 rather than 4

4) Multiply the top ones digit by the bottom tens.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 8 \ 0 \end{array}$$

5) Multiply the top tens digit by the bottom tens.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \end{array}$$

$4 \times 3 = 12$

6) Add the two answers together.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \\ \hline 1 \ 4 \ 4 \ 0 \end{array}$$

## Question 21 and 28 (sheet 1)

1)  $1821 \times 39$

2)  $1652 \times 28$

3)  $2342 \times 89$

4)  $1102 \times 50$

5)  $1828 \times 30$

6)  $1882 \times 96$

7)  $2279 \times 68$

8)  $1829 \times 88$

## Use long multiplication

$$\begin{array}{r} 3 \ 2 \\ \times 4 \ 5 \\ \hline \end{array}$$

1) Multiply the top ones digit by the bottom ones.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 0 \end{array}$$

$$2 \times 5 = 10$$

Carry the one.

2) Multiply the top tens digit by the bottom ones.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

3) Add a zero below the ones digits.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

This shows that you are multiplying by 40 rather than 4

4) Multiply the top ones digit by the bottom tens.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 8 \ 0 \end{array}$$

$$4 \times 2 = 8$$

5) Multiply the top tens digit by the bottom tens.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \end{array}$$

$$4 \times 3 = 12$$

6) Add the two answers together.

$$\begin{array}{r} \times 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \\ \hline 1 \ 4 \ 4 \ 0 \end{array}$$

## Question 21 and 28 (sheet 2)

1)  $1394 \times 98$

2)  $1124 \times 36$

3)  $1597 \times 27$

4)  $2332 \times 41$

5)  $1124 \times 16$

6)  $1352 \times 33$

7)  $1325 \times 31$

8)  $2007 \times 27$

## Use long multiplication

$$\begin{array}{r} 3 \ 2 \\ \times 4 \ 5 \\ \hline \end{array}$$

1) Multiply the top ones digit by the bottom ones.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 0 \end{array}$$

2) Multiply the top tens digit by the bottom ones.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

3) Add a zero below the ones digits.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

This shows that you are multiplying by 40 rather than 4

4) Multiply the top ones digit by the bottom tens.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 8 \end{array}$$

5) Multiply the top tens digit by the bottom tens.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \end{array}$$

6) Add the two answers together.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \\ \hline 1 \ 4 \ 4 \ 0 \end{array}$$

## Question 21 and 28 (sheet 3)

1)  $1247 \times 55$

2)  $1323 \times 65$

3)  $1212 \times 33$

4)  $1436 \times 38$

5)  $1441 \times 25$

6)  $1749 \times 54$

7)  $1454 \times 90$

8)  $2491 \times 78$

## Use long multiplication

$$\begin{array}{r} 3 \ 2 \\ \times 4 \ 5 \\ \hline \end{array}$$

1) Multiply the top ones digit by the bottom ones.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 0 \end{array}$$

2) Multiply the top tens digit by the bottom ones.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

3) Add a zero below the ones digits.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \end{array}$$

This shows that you are multiplying by 40 rather than 4

4) Multiply the top ones digit by the bottom tens.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 8 \ 0 \end{array}$$

5) Multiply the top tens digit by the bottom tens.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \end{array}$$

$4 \times 3 = 12$

6) Add the two answers together.

$$\begin{array}{r} x \ 3 \ 2 \\ 4 \ 5 \\ \hline 1 \ 6 \ 1 \ 0 \\ 1 \ 2 \ 8 \ 0 \\ \hline 1 \ 4 \ 4 \ 0 \end{array}$$

## Question 21 and 28 (sheet 4)

1)  $1096 \times 77$

2)  $2366 \times 80$

3)  $2224 \times 40$

4)  $2033 \times 33$

5)  $2448 \times 77$

6)  $2477 \times 46$

7)  $1359 \times 53$

8)  $2035 \times 89$

Use long multiplication- Questions 21 and 28 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 71,019	1) 136,612	1) 68,585	1) 84,392
2) 46,256	2) 40,464	2) 85,995	2) 189,280
3) 208,438	3) 43,119	3) 39,996	3) 88,960
4) 55,100	4) 95,612	4) 54,568	4) 67,089
5) 54,840	5) 17,984	5) 36,025	5) 188,496
6) 180,672	6) 44,616	6) 94,446	6) 113,942
7) 154,972	7) 41,075	7) 130,860	7) 72,027
8) 160,952	8) 54,189	8) 194,298	8) 181,115

## Multiply by 10, 100 and 1000

$$4.5 \times 10$$

Th H T 0.t h th

4  
5

Makes the number 10 times bigger.  
Move each digit one place to the left.

$$4.5 \times 100$$

Th H T 0.t h th

4  
5  
0

Makes the number 100

times bigger.

Move each digit two places to the left.

$$4.5 \times 1000$$

Th H T 0.t h th

4  
5  
0  
0

Makes the number 1000

times bigger.

Move each digit three places to the left.

1) Lay out the number

2) Work out the number of places the digits need to move.

## Question 29 (sheet 1)

1)  $23.5 \times 100$

2)  $1.15 \times 100$

3)  $4.97 \times 10$

4)  $69.8 \times 100$

5)  $0.12 \times 1000$

6)  $0.28 \times 100$

7)  $24.4 \times 10$

8)  $5.08 \times 100$

## Multiply by 10, 100 and 1000

$$4.5 \times 10$$

Th H T 0.t h th

4  
5

Makes the number 10 times bigger.  
Move each digit one place to the left.

$$4.5 \times 100$$

Th H T 0.t h th

4  
5  
0

Makes the number 100

times bigger.

Move each digit two places to the left.

$$4.5 \times 1000$$

Th H T 0.t h th

4  
5  
0  
0

Makes the number 1000

times bigger.

Move each digit three places to the left.

1) Lay out the number

2) Work out the number of places the digits need to move.

## Question 29 (sheet 2)

1)  $85.2 \times 10$

2)  $59.2 \times 10$

3)  $74.8 \times 10$

4)  $0.13 \times 10$

5)  $6 \times 10$

6)  $9.05 \times 100$

7)  $4.7 \times 1000$

8)  $0.81 \times 100$

## Multiply by 10, 100 and 1000

$$4.5 \times 10$$

Th H T 0.t h th

4  
5

Makes the number 10 times bigger.  
Move each digit one place to the left.

$$4.5 \times 100$$

Th H T 0.t h th

4  
5  
0

Makes the number 100

times bigger.

Move each digit two places to the left.

$$4.5 \times 1000$$

Th H T 0.t h th

4  
5  
0  
0

Makes the number 1000

times bigger.

Move each digit three places to the left.

1) Lay out the number

2) Work out the number of places the digits need to move.

## Question 29 (sheet 3)

1)  $84 \times 10$

2)  $5.05 \times 10$

3)  $8.1 \times 1000$

4)  $9.32 \times 10$

5)  $24.3 \times 100$

6)  $55.3 \times 100$

7)  $96 \times 10$

8)  $6.76 \times 100$

## Multiply by 10, 100 and 1000

$$4.5 \times 10$$

Th H T 0.t h th

4  
5

Makes the number 10 times bigger.  
Move each digit one place to the left.

$$4.5 \times 100$$

Th H T 0.t h th

4  
5  
0

Makes the number 100

times bigger.

Move each digit two places to the left.

$$4.5 \times 1000$$

Th H T 0.t h th

4  
5  
0  
0

Makes the number 1000

times bigger.

Move each digit three places to the left.

1) Lay out the number

2) Work out the number of places the digits need to move.

## Question 29 (sheet 4)

1)  $0.24 \times 100$

2)  $3.26 \times 100$

3)  $54.3 \times 10$

4)  $5.14 \times 100$

5)  $6.45 \times 100$

6)  $82.9 \times 100$

7)  $79 \times 10$

8)  $0.2 \times 1000$

Multiply by 10, 100 and 1000- Question 29 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 2350	1) 852	1) 840	1) 24
2) 115	2) 592	2) 50.5	2) 326
3) 49.7	3) 748	3) 8100	3) 543
4) 6980	4) 1.3	4) 93.2	4) 514
5) 120	5) 60	5) 2430	5) 645
6) 28	6) 905	6) 5530	6) 8290
7) 244	7) 4700	7) 960	7) 790
8) 508	8) 81	8) 676	8) 200

## Multiplying decimals

$$8.53 \times 6$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \\ \hline 31 \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \\ \hline 31 \end{array}$$

$$853 \times 6 = 5118$$

$$8.53 \times 6 = 51.18$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

1)  $7.3 \times 5$

2)  $2.7 \times 4$

3)  $5.3 \times 8$

4)  $9.1 \times 3$

5)  $12.3 \times 4$

6)  $2.5 \times 7$

7)  $3.1 \times 5$

8)  $6.8 \times 4$

## Question 17 (sheet 1)

## Multiplying decimals

$$8.53 \times 6$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

$$8.53 \times 6 = 51.18$$

2) Work out the number of places the digits need to move.

## Question 17 (sheet 2)

1)  $34.23 \times 7$

2)  $74.83 \times 3$

3)  $83.92 \times 4$

4)  $84.72 \times 8$

5)  $54.48 \times 5$

6)  $47.32 \times 7$

7)  $57.83 \times 6$

8)  $27.47 \times 9$

## Multiplying decimals

$$8.53 \times 6$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

$$8.53 \times 6 = 51.18$$

2) Work out the number of places the digits need to move.

## Question 17 (sheet 3)

1)  $64.23 \times 1.7$

2)  $3.83 \times 3.3$

3)  $83.2 \times 4.2$

4)  $4.12 \times 18$

5)  $74.48 \times 5.3$

6)  $47.2 \times 7.6$

7)  $7.93 \times 6.1$

8)  $17.2 \times 1.9$

## Multiplying decimals

$$8.53 \times 6$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

$$8.53 \times 6 = 51.18$$

2) Work out the number of places the digits need to move.

## Question 17 (sheet 4)

1)  $33.4 \times 2.3$

2)  $45.2 \times 3.1$

3)  $3.4 \times 4.6$

4)  $23.45 \times 2.3$

5)  $89.3 \times 3.3$

6)  $24.2 \times 6.7$

7)  $34.2 \times 4.5$

8)  $1.21 \times 1.2$

## Multiplying decimals- Question 17 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $7.3 \times 5 = 36.5$	1) $34.23 \times 7 = 239.61$	1) $64.23 \times 1.7 = 109.191$	1) $33.4 \times 2.3 = 76.82$
2) $2.7 \times 4 = 10.8$	2) $74.83 \times 3 = 224.49$	2) $3.83 \times 3.3 = 12.639$	2) $45.2 \times 3.1 = 140.12$
3) $5.3 \times 8 = 42.4$	3) $83.92 \times 4 = 335.68$	3) $83.2 \times 4.2 = 349.44$	3) $3.4 \times 4.6 = 15.64$
4) $9.1 \times 3 = 27.3$	4) $84.72 \times 8 = 677.76$	4) $4.12 \times 18 = 74.16$	4) $23.45 \times 2.3 = 53.935$
5) $12.3 \times 4 = 49.2$	5) $54.48 \times 5 = 272.4$	5) $74.48 \times 5.3 = 394.744$	5) $89.3 \times 3.3 = 294.69$
6) $2.5 \times 7 = 17.5$	6) $47.32 \times 7 = 331.24$	6) $47.2 \times 7.6 = 361.552$	6) $24.2 \times 6.7 = 162.14$
7) $3.1 \times 5 = 15.5$	7) $57.83 \times 6 = 346.98$	7) $7.93 \times 6.1 = 48.373$	7) $34.2 \times 4.5 = 153.9$
8) $6.8 \times 4 = 27.2$	8) $27.47 \times 9 = 220.23$	8) $17.2 \times 1.9 = 32.68$	8) $1.21 \times 1.2 = 1.452$

### Use short division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$6 \overline{)2 \ 5} \div 4 =$$

$$\begin{array}{r} 1 \ 5 \ 6 \\ \hline 4 \overline{)6 \ 2 \ 5} \end{array}$$

1) Starting from the left, see how many times the divisor will go into each digit of the dividend

$$\begin{array}{r} 1 \ 5 \ 6 \ r \ 1 \\ \hline 4 \overline{)6 \ 2 \ 2 \ 5} \end{array}$$

2) When you reach the last digit, if there is a remainder, add a 'r' and the number that is left over.

You can check by doing short multiplication.

$$1 \ 5 \ 6 \times 4 = 6 \ 2 \ 4$$



Add the remainder= 6 2 5

### Question 11 (sheet 1)

1)  $1256 \div 8$

2)  $7263 \div 9$

3)  $1520 \div 4$

4)  $2090 \div 5$

5)  $3654 \div 6$

6)  $1040 \div 8$

7)  $4620 \div 7$

8)  $1590 \div 3$

### Use short division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$6 \overline{)2 \ 5} \div 4 =$$

$$\begin{array}{r} 1 \ 5 \ 6 \\ \hline 4 \overline{)6 \ 2 \ 5} \end{array}$$

1) Starting from the left, see how many times the divisor will go into each digit of the dividend

$$\begin{array}{r} 1 \ 5 \ 6 \ r \ 1 \\ \hline 4 \overline{)6 \ 2 \ 2 \ 5} \end{array}$$

2) When you reach the last digit, if there is a remainder, add a 'r' and the number that is left over.

You can check by doing short multiplication.

$$1 \ 5 \ 6 \times 4 = 6 \ 2 \ 4$$



Add the remainder= 6 2 5

### Question 11 (sheet 2)

1)  $5744 \div 8$

2)  $3944 \div 4$

3)  $1106 \div 2$

4)  $867 \div 3$

5)  $4905 \div 5$

6)  $2961 \div 9$

7)  $7830 \div 9$

8)  $3148 \div 4$

### Use short division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$6 \overline{)2 \ 5} \div 4 =$$

$$\begin{array}{r} 1 \ 5 \ 6 \\ \hline 4 \overline{)6 \ 2 \ 5} \end{array}$$

1) Starting from the left, see how many times the divisor will go into each digit of the dividend

$$\begin{array}{r} 1 \ 5 \ 6 \ r \ 1 \\ \hline 4 \overline{)6 \ 2 \ 2 \ 5} \end{array}$$

2) When you reach the last digit, if there is a remainder, add a 'r' and the number that is left over.

You can check by doing short multiplication.

$$1 \ 5 \ 6 \times 4 = 6 \ 2 \ 4$$



Add the remainder= 6 2 5

### Question 11 (sheet 3)

1)  $366 \div 2$

2)  $2478 \div 6$

3)  $4795 \div 7$

4)  $1170 \div 2$

5)  $1939 \div 7$

6)  $2601 \div 3$

7)  $4332 \div 6$

8)  $4815 \div 5$

### Use short division

$$2 \overline{)4} \div 4 = 6$$

divisor → quotient ← dividend

$$6 \overline{)2 \ 5} \div 4 =$$

$$\begin{array}{r} 1 \ 5 \ 6 \\ \hline 4 \overline{)6 \ 2 \ 5} \end{array}$$

1) Starting from the left, see how many times the divisor will go into each digit of the dividend

$$\begin{array}{r} 1 \ 5 \ 6 \ r \ 1 \\ \hline 4 \overline{)6 \ 2 \ 2 \ 5} \end{array}$$

2) When you reach the last digit, if there is a remainder, add a 'r' and the number that is left over.

You can check by doing short multiplication.

$$1 \ 5 \ 6 \times 4 = 6 \ 2 \ 4$$



Add the remainder= 6 2 5

### Question 11 (sheet 4)

1)  $1356 \div 4$

2)  $7533 \div 9$

3)  $4128 \div 6$

4)  $6356 \div 7$

5)  $2864 \div 8$

6)  $1050 \div 2$

7)  $633 \div 3$

8)  $668 \div 2$

## Short division- Question 11 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 157	1) 718	1) 183	1) 339
2) 807	2) 986	2) 413	2) 837
3) 380	3) 553	3) 685	3) 688
4) 418	4) 289	4) 585	4) 908
5) 609	5) 981	5) 277	5) 358
6) 130	6) 329	6) 867	6) 525
7) 660	7) 870	7) 722	7) 211
8) 530	8) 787	8) 983	8) 334

## Use short multiplication (decimals)

$$\begin{array}{r} 853 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \\ 1 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \\ 31 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \\ 31 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

## Question 10 (sheet 1)

1)  $3984 \times 2$

2)  $4269 \times 4$

3)  $1438 \times 4$

4)  $3901 \times 4$

5)  $2803 \times 4$

6)  $3646 \times 4$

7)  $4061 \times 3$

8)  $1780 \times 2$

## Use short multiplication (decimals)

$$\begin{array}{r} 853 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \\ 1 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \\ 31 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \\ 31 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

## Question 10 (sheet 2)

1)  $1685 \times 4$

2)  $3152 \times 2$

3)  $1391 \times 2$

4)  $3171 \times 3$

5)  $2809 \times 2$

6)  $2147 \times 4$

7)  $3727 \times 2$

8)  $1360 \times 2$

## Use short multiplication (decimals)

$$\begin{array}{r} 853 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \\ 1 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \\ 31 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \\ 31 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

## Question 10 (sheet 3)

1)  $5386 \times 4$

2)  $5148 \times 4$

3)  $2407 \times 6$

4)  $2375 \times 5$

5)  $1500 \times 3$

6)  $8715 \times 5$

7)  $3595 \times 2$

8)  $3168 \times 4$

## Use short multiplication )

$$\begin{array}{r} 853 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 8 \\ 1 \end{array}$$

1) Multiply the top ones digit by the multiplier. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 18 \\ 31 \end{array}$$

2) Multiply the top tens digit by the multiplier. Add any carried digits. Carry the extra digit if needed.

$$\begin{array}{r} 853 \\ \times 6 \\ \hline 118 \\ 31 \end{array}$$

3) Multiply the top hundreds digit by the multiplier. Add any carried digits.

$$853 \times 6 = 5118$$

## Question 10 (sheet 4)

1)  $8308 \times 3$

2)  $8973 \times 5$

3)  $1702 \times 2$

4)  $5889 \times 4$

5)  $9929 \times 4$

6)  $1735 \times 3$

7)  $4472 \times 3$

8)  $2753 \times 2$

## Short multiplication- Question 10 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 7,968	1) 6,740	1) 21,544	1) 24,924
2) 17,076	2) 6,304	2) 20,592	2) 44,865
3) 5,752	3) 2,782	3) 14,442	3) 3,404
4) 15,604	4) 9,513	4) 11,875	4) 23,556
5) 11,212	5) 5,618	5) 4,500	5) 39,716
6) 14,584	6) 8,588	6) 43,575	6) 5,205
7) 12,183	7) 7,454	7) 7,190	7) 13,416
8) 3,560	8) 2,720	8) 12,672	8) 5,506

## Square numbers

A square number is the product of multiplying a number by itself.

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9$$

$$4^2 = 4 \times 4 = 16$$

$$5^2 = 5 \times 5 = 25$$

$$6^2 = 6 \times 6 = 36$$

$$7^2 = 7 \times 7 = 49$$

$$8^2 = 8 \times 8 = 64$$

$$9^2 = 9 \times 9 = 81$$

$$10^2 = 10 \times 10 = 100$$

$$11^2 = 11 \times 11 = 121$$

$$12^2 = 12 \times 12 = 144$$

## Question 8 (sheet 1)

1)  $2^3 + 6^2$

2)  $7^3 + 2^2$

3)  $3^2 + 7^3$

4)  $11^2 + 10^2$

5)  $3^3 + 9^2$

6)  $10^2 + 2^3$

7)  $5^2 + 5^3$

8)  $8^2 + 3^3$

## Square numbers

A square number is the product of multiplying a number by itself.

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9$$

$$4^2 = 4 \times 4 = 16$$

$$5^2 = 5 \times 5 = 25$$

$$6^2 = 6 \times 6 = 36$$

$$7^2 = 7 \times 7 = 49$$

$$8^2 = 8 \times 8 = 64$$

$$9^2 = 9 \times 9 = 81$$

$$10^2 = 10 \times 10 = 100$$

$$11^2 = 11 \times 11 = 121$$

$$12^2 = 12 \times 12 = 144$$

## Question 8 (sheet 2)

1)  $1^3 + 6^2$

2)  $7^3 + 3^2$

3)  $2^2 + 4^3$

4)  $5^2 + 10^2$

5)  $4^3 + 5^2$

6)  $9^2 + 2^3$

7)  $3^2 + 5^3$

8)  $8^2 + 3^3$

## Cube numbers

A cube number is the product of multiplying a number by itself, then by itself again.

$$1^3 = 1 \times 1 \times 1 = 1$$

$$2^3 = 2 \times 2 \times 2 = 8$$

$$3^3 = 3 \times 3 \times 3 = 27$$

$$4^3 = 4 \times 4 \times 4 = 64$$

$$5^3 = 5 \times 5 \times 5 = 125$$

$$6^3 = 6 \times 6 \times 6 = 216$$

$$7^3 = 7 \times 7 \times 7 = 343$$

$$8^3 = 8 \times 8 \times 8 = 512$$

$$9^3 = 9 \times 9 \times 9 = 729$$

$$10^3 = 10 \times 10 \times 10 = 1000$$

$$11^3 = 11 \times 11 \times 11 = 1331$$

$$12^3 = 12 \times 12 \times 12 = 1728$$

## Square numbers

A square number is the product of multiplying a number by itself.

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9$$

$$4^2 = 4 \times 4 = 16$$

$$5^2 = 5 \times 5 = 25$$

$$6^2 = 6 \times 6 = 36$$

$$7^2 = 7 \times 7 = 49$$

$$8^2 = 8 \times 8 = 64$$

$$9^2 = 9 \times 9 = 81$$

$$10^2 = 10 \times 10 = 100$$

$$11^2 = 11 \times 11 = 121$$

$$12^2 = 12 \times 12 = 144$$

## Question 8 (sheet 3)

1)  $1^3 + 7^2$

2)  $3^3 + 2^2$

3)  $5^2 + 4^3$

4)  $3^2 + 9^2$

5)  $4^3 + 2^2$

6)  $6^2 + 3^3$

7)  $3^2 + 5^3$

8)  $8^2 + 1^3$

## Cube numbers

A cube number is the product of multiplying a number by itself, then by itself again.

$$1^3 = 1 \times 1 \times 1 = 1$$

$$2^3 = 2 \times 2 \times 2 = 8$$

$$3^3 = 3 \times 3 \times 3 = 27$$

$$4^3 = 4 \times 4 \times 4 = 64$$

$$5^3 = 5 \times 5 \times 5 = 125$$

$$6^3 = 6 \times 6 \times 6 = 216$$

$$7^3 = 7 \times 7 \times 7 = 343$$

$$8^3 = 8 \times 8 \times 8 = 512$$

$$9^3 = 9 \times 9 \times 9 = 729$$

$$10^3 = 10 \times 10 \times 10 = 1000$$

$$11^3 = 11 \times 11 \times 11 = 1331$$

$$12^3 = 12 \times 12 \times 12 = 1728$$

## Square numbers

A square number is the product of multiplying a number by itself.

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9$$

$$4^2 = 4 \times 4 = 16$$

$$5^2 = 5 \times 5 = 25$$

$$6^2 = 6 \times 6 = 36$$

$$7^2 = 7 \times 7 = 49$$

$$8^2 = 8 \times 8 = 64$$

$$9^2 = 9 \times 9 = 81$$

$$10^2 = 10 \times 10 = 100$$

$$11^2 = 11 \times 11 = 121$$

$$12^2 = 12 \times 12 = 144$$

## Question 8 (sheet 4)

1)  $2^3 + 7^2$

2)  $4^3 + 2^2$

3)  $3^2 + 4^3$

4)  $1^2 + 9^2$

5)  $2^3 + 2^2$

6)  $5^2 + 3^3$

7)  $2^2 + 5^3$

8)  $1^2 + 3^3$

## Cube numbers

A cube number is the product of multiplying a number by itself, then by itself again.

$$1^3 = 1 \times 1 \times 1 = 1$$

$$2^3 = 2 \times 2 \times 2 = 8$$

$$3^3 = 3 \times 3 \times 3 = 27$$

$$4^3 = 4 \times 4 \times 4 = 64$$

$$5^3 = 5 \times 5 \times 5 = 125$$

$$6^3 = 6 \times 6 \times 6 = 216$$

$$7^3 = 7 \times 7 \times 7 = 343$$

$$8^3 = 8 \times 8 \times 8 = 512$$

$$9^3 = 9 \times 9 \times 9 = 729$$

$$10^3 = 10 \times 10 \times 10 = 1000$$

$$11^3 = 11 \times 11 \times 11 = 1331$$

$$12^3 = 12 \times 12 \times 12 = 1728$$

## Square and cube numbers- Question 8 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 44	1) 37	1) 50	1) 76
2) 347	2) 352	2) 31	2) 70
3) 352	3) 68	3) 89	3) 73
4) 221	4) 125	4) 90	4) 82
5) 108	5) 89	5) 70	5) 12
6) 108	6) 89	6) 63	6) 52
7) 150	7) 134	7) 134	7) 129
8) 91	8) 128	8) 65	8) 28

## Subtracting decimal from whole

$$1 \ 8 - 2 . 8$$

T O.t h

$$\begin{array}{r} 1 \ 8 . \ 0 \\ + 0 \ 2 . 8 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, exchange from the next column.

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline . \ 2 \end{array}$$

Exchange from the ones digit

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline 5 . 2 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline 1 \ 5 . 2 \end{array}$$

## Question 20 (sheet 1)

1)  $4 - 0.13$

2)  $16 - 0.13$

3)  $3 - 0.012$

4)  $14 - 0.019$

5)  $17 - 0.04$

6)  $2 - 0.6$

7)  $15 - 0.16$

8)  $17 - 0.6$

## Subtracting decimal from whole

$$1 \ 8 - 2 . 8$$

T O.t h

$$\begin{array}{r} 1 \ 8 . \ 0 \\ + 0 \ 2 . 8 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, exchange from the next column.

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline . \ 2 \end{array}$$

Exchange from the ones digit

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline 5 . 2 \end{array}$$

$$\begin{array}{r} 1 \ 8 . \ 0 \\ - 0 \ 2 . 8 \\ \hline 1 \ 5 . 2 \end{array}$$

## Question 20 (sheet 2)

1)  $20 - 0.09$

2)  $18 - 0.11$

3)  $11.82$

4)  $17 - 0.03$

5)  $15 - 0.004$

6)  $3 - 0.019$

7)  $19 - 0.17$

8)  $10 - 0.005$

## Subtracting decimal from whole

$$1 \ 8 \ - 2 . 8$$

T 0.**t** h

$$\begin{array}{r} 1 \ 8 . \ 0 \\ + 0 \ 2 . 8 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, exchange from the next column.

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline . \ 2 \end{array}$$

Exchange from the ones digit

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline 5 . 2 \end{array}$$

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline 1 \ 5 . 2 \end{array}$$

## Question 20 (sheet 3)

1)  $18 - 0.8$

2)  $8 - 0.07$

3)  $12 - 1.3$

4)  $15 - 1.3$

5)  $4 - 0.004$

6)  $2 - 1.1$

7)  $15 - 0.008$

8)  $17 - 0.019$

## Subtracting decimal from whole

$$1 \ 8 \ - 2 . 8$$

T O.t h

$$\begin{array}{r} 1 \ 8 . \ 0 \\ + 0 \ 2 . 8 \\ \hline \end{array}$$

1) Align digits and decimal points.

2) Add zeros as placeholders if needed.

3) Starting from the right, subtract each column in turn. If the top digit is smaller than the bottom, exchange from the next column.

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline . \ 2 \end{array}$$

Exchange from the ones digit

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline 5 . 2 \end{array}$$

$$\begin{array}{r} 1 \cancel{8} . 0 \\ - 0 \ 2 . 8 \\ \hline 1 \ 5 . 2 \end{array}$$

## Question 20 (sheet 4)

1)  $5 - 1.5$

2)  $16 - 0.003$

3)  $11 - 0.019$

4)  $12 - 0.05$

5)  $5 - 0.07$

6)  $18 - 0.2$

7)  $17 - 0.19$

8)  $5 - 0.013$

## Subtracting decimal from whole- Question 20 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 3.87	1) 19.91	1) 17.2	1) 3.5
2) 15.87	2) 17.89	2) 7.93	2) 15.997
3) 2.988	3) 11.82	3) 10.7	3) 10.981
4) 13.981	4) 16.97	4) 13.7	4) 11.95
5) 16.96	5) 14.996	5) 3.996	5) 4.93
6) 1.4	6) 2.981	6) 0.9	6) 17.8
7) 14.84	7) 18.83	7) 14.992	7) 16.81
8) 16.4	8) 9.995	8) 16.981	8) 4.987

### Add fractions (mixed numbers)

$$1 \frac{3}{4} + 1 \frac{3}{8}$$

1) Add the two whole numbers together.

$$1 + 1 = 2$$

x2

2) Convert both fractions to have the same denominator.

$$\frac{3}{4} + \frac{3}{8}$$

x2

3) Add the numerators together.

$$\frac{6}{8} + \frac{3}{8} = \frac{9}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{9}{8} = 1 \frac{1}{8}$$

5) Add together your two answers.

$$2 + 1 \frac{1}{8} = 3 \frac{1}{8}$$

### Question 33 (sheet 1)

1)  $4\frac{1}{2} + 6\frac{1}{4}$

2)  $4\frac{1}{2} + 5\frac{2}{3}$

3)  $3\frac{1}{5} + 7\frac{2}{3}$

4)  $3\frac{2}{4} + 5\frac{8}{10}$

5)  $1\frac{2}{3} + 8\frac{1}{2}$

6)  $5\frac{1}{4} + 8\frac{2}{3}$

7)  $4\frac{3}{4} + 5\frac{5}{10}$

8)  $3\frac{1}{2} + 4\frac{1}{3}$

### Add fractions (mixed numbers)

$$1 \frac{3}{4} + 1 \frac{3}{8}$$

1) Add the two whole numbers together.

$$1 + 1 = 2$$

x2

2) Convert both fractions to have the same denominator.

$$\frac{3}{4} + \frac{3}{8}$$

x2

3) Add the numerators together.

$$\frac{6}{8} + \frac{3}{8} = \frac{9}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{9}{8} = 1 \frac{1}{8}$$

5) Add together your two answers.

$$2 + 1 \frac{1}{8} = 3 \frac{1}{8}$$

### Question 33 (sheet 2)

1)  $2\frac{1}{2} + 4\frac{1}{3}$

2)  $1\frac{4}{5} + 5\frac{2}{3}$

3)  $5\frac{2}{5} + 5\frac{2}{3}$

4)  $3\frac{1}{10} + 8\frac{1}{4}$

5)  $1\frac{3}{5} + 8\frac{3}{4}$

6)  $5\frac{5}{10} + 9\frac{1}{2}$

7)  $6\frac{1}{2} + 9\frac{1}{3}$

8)  $1\frac{2}{3} + 8\frac{1}{2}$

### Add fractions (mixed numbers)

$$1 \frac{3}{4} + 1 \frac{3}{8}$$

1) Add the two whole numbers together.

$$1 + 1 = 2$$

x2

2) Convert both fractions to have the same denominator.

$$\frac{3}{4} + \frac{3}{8}$$

x2

3) Add the numerators together.

$$\frac{6}{8} + \frac{3}{8} = \frac{9}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{9}{8} = 1 \frac{1}{8}$$

5) Add together your two answers.

$$2 + 1 \frac{1}{8} = 3 \frac{1}{8}$$

### Question 33 (sheet 3)

1)  $6\frac{4}{5} + 8\frac{3}{4}$

2)  $1\frac{1}{2} + 9\frac{4}{5}$

3)  $6\frac{3}{10} + 8\frac{1}{2}$

4)  $5\frac{7}{10} + 9\frac{3}{4}$

5)  $2\frac{1}{5} + 9\frac{3}{4}$

6)  $4\frac{1}{3} + 6\frac{8}{10}$

7)  $6\frac{2}{4} + 9\frac{8}{10}$

8)  $2\frac{3}{4} + 5\frac{1}{10}$

### Add fractions (mixed numbers)

$$1 \frac{3}{4} + 1 \frac{3}{8}$$

1) Add the two whole numbers together.

$$1 + 1 = 2$$

x2

2) Convert both fractions to have the same denominator.

$$\frac{3}{4} + \frac{3}{8}$$

x2

3) Add the numerators together.

$$\frac{6}{8} + \frac{3}{8} = \frac{9}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{9}{8} = 1 \frac{1}{8}$$

5) Add together your two answers.

$$2 + 1 \frac{1}{8} = 3 \frac{1}{8}$$

### Question 33 (sheet 4)

$$1) 4 \frac{2}{10} + 6 \frac{3}{5}$$

$$2) 5 \frac{7}{10} + 9 \frac{1}{2}$$

$$3) 6 \frac{1}{4} + 4 \frac{6}{10}$$

$$4) 1 \frac{2}{4} + 8 \frac{1}{3}$$

$$5) 1 \frac{1}{3} + 6 \frac{1}{4}$$

$$6) 3 \frac{2}{10} + 5 \frac{1}{4}$$

$$7) 1 \frac{1}{4} + 8 \frac{3}{5}$$

$$8) 3 \frac{1}{2} + 5 \frac{3}{4}$$

## Add fractions (mixed numbers)- Question 33 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $10\frac{3}{4}$	1) $6\frac{5}{6}$	1) $15\frac{11}{20}$	1) $10\frac{4}{5}$
2) $10\frac{1}{6}$	2) $11\frac{2}{15}$	2) $11\frac{3}{10}$	2) $15\frac{1}{5}$
3) $4\frac{1}{2}$	3) $11\frac{1}{5}$	3) $14\frac{4}{5}$	3) $10\frac{17}{20}$
4) $9\frac{3}{10}$	4) $11\frac{7}{20}$	4) $15\frac{9}{20}$	4) $9\frac{5}{6}$
5) $10\frac{1}{6}$	5) $10\frac{7}{20}$	5) $11\frac{19}{20}$	5) $7\frac{7}{12}$
6) $13\frac{11}{12}$	6) $15$	6) $11\frac{2}{15}$	6) $8\frac{9}{20}$
7) $10\frac{1}{4}$	7) $15\frac{5}{6}$	7) $16\frac{3}{10}$	7) $9\frac{17}{20}$
8) $7\frac{5}{6}$	8) $10\frac{1}{6}$	8) $7\frac{17}{20}$	8) $9\frac{1}{4}$

## Subtracting fractions (mixed numbers)

$$2\frac{3}{4} - 1\frac{1}{8}$$

1) Change any mixed numbers to improper fractions.

$$\frac{11}{4} - \frac{9}{8}$$

2) Convert both fractions to have the same denominator.

$$\frac{11}{4} - \frac{9}{8}$$

x2

3) Subtract the second numerator from the first.

$$2\frac{2}{8} - \frac{9}{8} = \frac{1}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{1}{8} = 1\frac{5}{8}$$

5) Simplify the answer if you can.

## Question 16 (sheet 1)

$$1) 8\frac{1}{2} - 2\frac{8}{10}$$

$$2) 5\frac{1}{3} - 4\frac{1}{2}$$

$$3) 7\frac{2}{4} - 3\frac{7}{10}$$

$$4) 7\frac{1}{5} - 3\frac{3}{4}$$

$$5) 5\frac{1}{10} - 4\frac{1}{5}$$

$$6) 9\frac{1}{5} - 1\frac{4}{10}$$

$$7) 9\frac{1}{2} - 4\frac{3}{5}$$

$$8) 5\frac{1}{4} - 3\frac{2}{3}$$

## Subtracting fractions (mixed numbers)

$$2\frac{3}{4} - 1\frac{1}{8}$$

1) Change any mixed numbers to improper fractions.

$$\frac{11}{4} - \frac{9}{8}$$

2) Convert both fractions to have the same denominator.

$$\frac{11}{4} - \frac{9}{8}$$

x2

3) Subtract the second numerator from the first.

$$2\frac{2}{8} - \frac{9}{8} = \frac{1}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{1}{8} = 1\frac{5}{8}$$

5) Simplify the answer if you can.

## Question 16 (sheet 2)

$$1) 5\frac{1}{10} - 3\frac{1}{2}$$

$$2) 6\frac{2}{10} - 2\frac{1}{2}$$

$$3) 6\frac{1}{4} - 4\frac{3}{5}$$

$$4) 9\frac{2}{3} - 4\frac{3}{4}$$

$$5) 6\frac{1}{4} - 2\frac{2}{3}$$

$$6) 6\frac{1}{4} - 4\frac{1}{2}$$

$$7) 6\frac{1}{5} - 2\frac{2}{4}$$

$$8) 8\frac{1}{3} - 1\frac{3}{4}$$

## Subtracting fractions (mixed numbers)

$$2\frac{3}{4} - 1\frac{1}{8}$$

1) Change any mixed numbers to improper fractions.

$$\frac{11}{4} - \frac{9}{8}$$

2) Convert both fractions to have the same denominator.

$$\frac{11}{4} - \frac{9}{8}$$

x2

3) Subtract the second numerator from the first.

$$2\frac{2}{8} - \frac{9}{8} = \frac{1}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{1}{8} = 1\frac{5}{8}$$

5) Simplify the answer if you can.

## Question 16 (sheet 3)

$$1) 8\frac{1}{3} - 1\frac{4}{5}$$

$$2) 9\frac{1}{5} - 3\frac{3}{10}$$

$$3) 8\frac{1}{3} - 1\frac{3}{5}$$

$$4) 9\frac{1}{3} - 2\frac{1}{2}$$

$$5) 6\frac{1}{2} - 1\frac{8}{10}$$

$$6) 9\frac{1}{3} - 2\frac{7}{10}$$

$$7) 8\frac{1}{3} - 2\frac{4}{5}$$

$$8) 6\frac{2}{5} - 4\frac{8}{10}$$

## Subtracting fractions (mixed numbers)

$$2\frac{3}{4} - 1\frac{1}{8}$$

1) Change any mixed numbers to improper fractions.

$$\frac{11}{4} - \frac{9}{8}$$

2) Convert both fractions to have the same denominator.

$$\frac{11}{4} - \frac{9}{8}$$

x2

3) Subtract the second numerator from the first.

$$2\frac{2}{8} - \frac{9}{8} = \frac{1}{8}$$

4) Change any improper fractions back to mixed numbers.

$$\frac{1}{8} = 1\frac{5}{8}$$

5) Simplify the answer if you can.

## Question 16 (sheet 4)

$$1) 7\frac{4}{10} - 4\frac{1}{2}$$

$$2) 7\frac{1}{2} - 3\frac{3}{5}$$

$$3) 8\frac{2}{4} - 2\frac{7}{10}$$

$$4) 6\frac{3}{4} - 3\frac{8}{10}$$

$$5) 9\frac{1}{2} - 4\frac{3}{5}$$

$$6) 5\frac{1}{4} - 4\frac{1}{3}$$

$$7) 6\frac{1}{2} - 2\frac{6}{10}$$

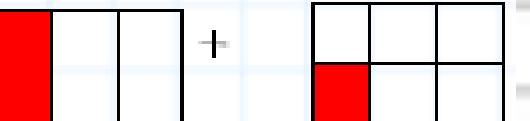
$$8) 7\frac{1}{2} - 1\frac{2}{3}$$

## Subtract fractions (mixed numbers)- Question 16 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $5\frac{7}{10}$	1) $1\frac{3}{5}$	1) $6\frac{8}{15}$	1) $2\frac{9}{10}$
2) $\frac{5}{6}$	2) $3\frac{7}{10}$	2) $5\frac{9}{10}$	2) $3\frac{9}{10}$
3) $3\frac{4}{5}$	3) $1\frac{13}{20}$	3) $6\frac{11}{15}$	3) $5\frac{4}{5}$
4) $3\frac{9}{20}$	4) $4\frac{11}{12}$	4) $6\frac{5}{6}$	4) $2\frac{19}{20}$
5) $\frac{9}{10}$	5) $3\frac{7}{12}$	5) $4\frac{7}{10}$	5) $4\frac{9}{10}$
6) $7\frac{4}{5}$	6) $1\frac{3}{4}$	6) $6\frac{19}{30}$	6) $\frac{11}{12}$
7) $4\frac{9}{10}$	7) $3\frac{7}{10}$	7) $5\frac{8}{15}$	7) $3\frac{9}{10}$
8) $1\frac{7}{12}$	8) $6\frac{7}{12}$	8) $1\frac{3}{5}$	8) $5\frac{5}{6}$

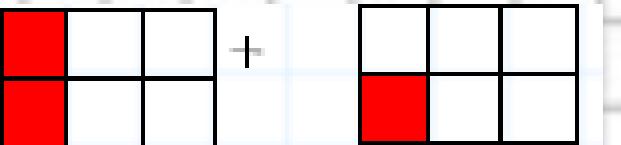
## Adding fractions

$$\frac{1}{3} + \frac{1}{6}$$



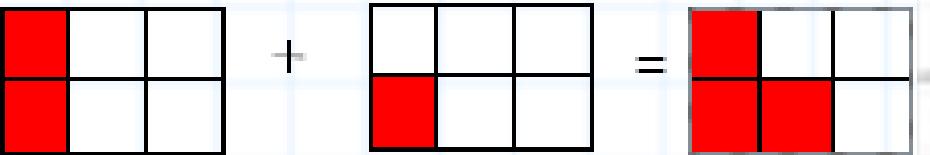
1) Convert both fractions to have the same denominator.  $\frac{1}{3} \xrightarrow{x2} + \frac{1}{6}$

$$\frac{2}{6} + \frac{1}{6}$$



2) Add the numerators, but not the denominators.

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$



3) Simplify the answer if you can.

$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

## Question 33 (sheet 1)

$$1) \frac{9}{27} + \frac{8}{9}$$

$$2) \frac{3}{4} + \frac{3}{6}$$

$$3) \frac{2}{3} + \frac{4}{6}$$

$$4) \frac{4}{21} + \frac{5}{7}$$

$$5) \frac{8}{13} + \frac{9}{26}$$

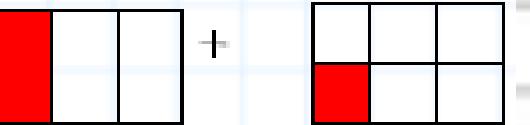
$$6) \frac{9}{16} + \frac{2}{4}$$

$$7) \frac{3}{6} + \frac{3}{18}$$

$$8) \frac{1}{5} + \frac{5}{20}$$

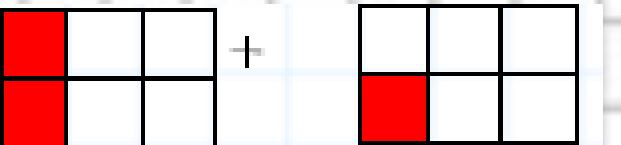
## Adding fractions

$$\frac{1}{3} + \frac{1}{6}$$



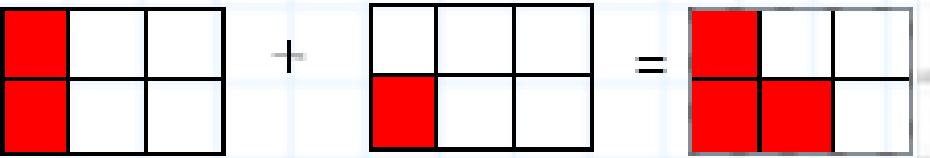
1) Convert both fractions to have the same denominator.  $\frac{1}{3} \xrightarrow{\times 2} + \frac{1}{6}$

$$\frac{2}{6} + \frac{1}{6}$$



2) Add the numerators, but not the denominators.

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$



3) Simplify the answer if you can.

$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

## Question 33 (sheet 2)

$$1) \frac{3}{28} + \frac{5}{7}$$

$$2) \frac{8}{20} + \frac{1}{4}$$

$$3) \frac{2}{9} + \frac{2}{6}$$

$$4) \frac{2}{7} + \frac{9}{14}$$

$$5) \frac{8}{20} + \frac{2}{5}$$

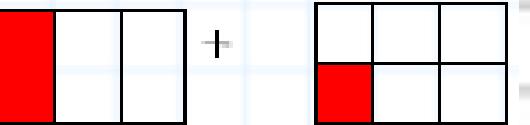
$$6) \frac{10}{14} + \frac{6}{7}$$

$$7) \frac{1}{5} + \frac{3}{10}$$

$$8) \frac{4}{9} + \frac{9}{27}$$

## Adding fractions

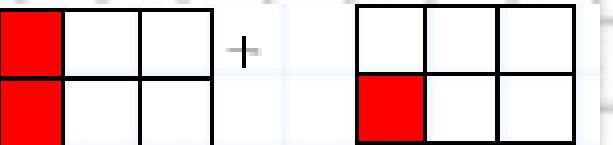
$$\frac{1}{3} + \frac{1}{6}$$



1) Convert both fractions to have the same denominator.

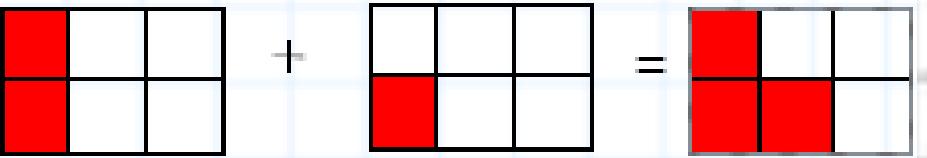
$$\frac{1}{3} \xrightarrow{x2} + \frac{1}{6}$$

$$\frac{2}{6} + \frac{1}{6}$$



2) Add the numerators, but not the denominators.

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$



3) Simplify the answer if you can.

$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

## Question 33 (sheet 3)

1)  $\frac{9}{26} + \frac{2}{13}$

2)  $\frac{4}{7} + \frac{1}{4}$

3)  $\frac{10}{20} + \frac{8}{10}$

4)  $\frac{2}{11} + \frac{11}{22}$

5)  $\frac{6}{15} + \frac{3}{30}$

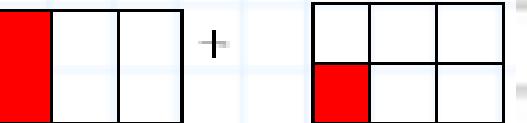
6)  $\frac{2}{3} + \frac{10}{12}$

7)  $\frac{6}{9} + \frac{7}{27}$

8)  $\frac{1}{10} + \frac{1}{3}$

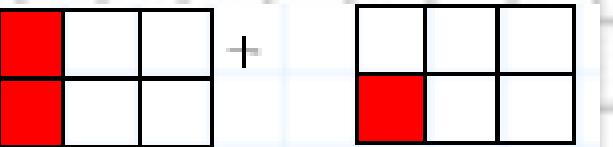
## Adding fractions

$$\frac{1}{3} + \frac{1}{6}$$



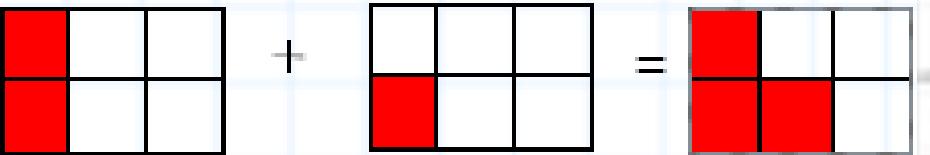
1) Convert both fractions to have the same denominator.  $\frac{1}{3} \xrightarrow{x2} + \frac{1}{6}$

$$\frac{2}{6} + \frac{1}{6}$$



2) Add the numerators, but not the denominators.

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$



3) Simplify the answer if you can.

$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

## Question 33 (sheet 4)

1)  $\frac{7}{9} + \frac{4}{27}$

2)  $\frac{8}{11} + \frac{1}{22}$

3)  $\frac{1}{3} + \frac{2}{12}$

4)  $\frac{7}{18} + \frac{8}{9}$

5)  $\frac{10}{18} + \frac{3}{9}$

6)  $\frac{5}{21} + \frac{5}{7}$

7)  $\frac{2}{10} + \frac{2}{4}$

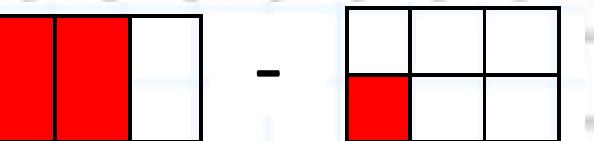
8)  $\frac{11}{26} + \frac{8}{13}$

## Adding fractions- Question 33 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $1\frac{2}{9}$	1) $\frac{23}{28}$	1) $\frac{1}{2}$	1) $\frac{25}{27}$
2) $1\frac{1}{4}$	2) $\frac{13}{20}$	2) $\frac{9}{14}$	2) $\frac{17}{22}$
3) $1\frac{1}{3}$	3) $\frac{5}{9}$	3) $1\frac{3}{10}$	3) $\frac{1}{2}$
4) $\frac{19}{21}$	4) $\frac{13}{14}$	4) $\frac{15}{22}$	4) $1\frac{5}{18}$
5) $\frac{25}{26}$	5) $\frac{4}{5}$	5) $\frac{1}{2}$	5) $\frac{8}{9}$
6) $1\frac{1}{16}$	6) $1\frac{4}{7}$	6) $1\frac{1}{2}$	6) $\frac{20}{21}$
7) $\frac{2}{3}$	7) $\frac{1}{2}$	7) $\frac{25}{27}$	7) $\frac{7}{10}$
8) $1\frac{3}{28}$	8) $\frac{7}{9}$	8) $\frac{13}{30}$	8) $1\frac{1}{26}$

## Subtracting fractions

$$\frac{2}{3} - \frac{1}{6}$$

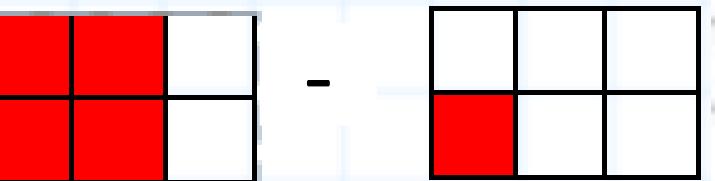


1) Convert both fractions to have the same denominator.

$$\frac{2}{3} - \frac{1}{6}$$

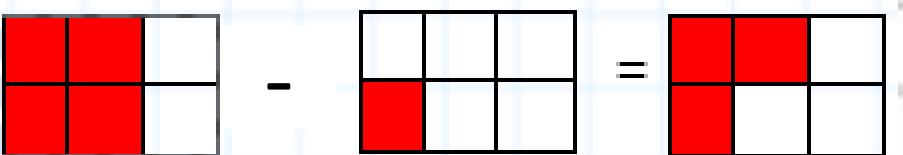
$\times 2$        $\times 2$

$$\frac{4}{6} - \frac{1}{6}$$



2) Subtract the numerators, but not the denominators.

$$\frac{4}{6} - \frac{1}{6} = \frac{3}{6}$$



$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

$\div 3$

## Question 16 (sheet 1)

$$1) \frac{8}{10} - \frac{10}{20}$$

$$2) \frac{7}{11} - \frac{10}{22}$$

$$3) \frac{5}{6} - \frac{3}{10}$$

$$4) \frac{4}{5} - \frac{1}{30}$$

$$5) \frac{9}{21} - \frac{1}{7}$$

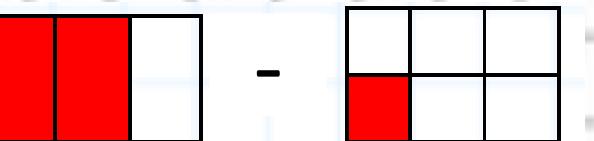
$$6) \frac{2}{4} - \frac{4}{16}$$

$$7) \frac{7}{28} - \frac{2}{14}$$

$$8) \frac{2}{8} - \frac{1}{16}$$

## Subtracting fractions

$$\frac{2}{3} - \frac{1}{6}$$

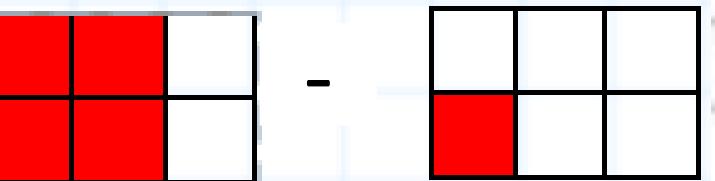


1) Convert both fractions to have the same denominator.

$$\frac{2}{3} - \frac{1}{6}$$

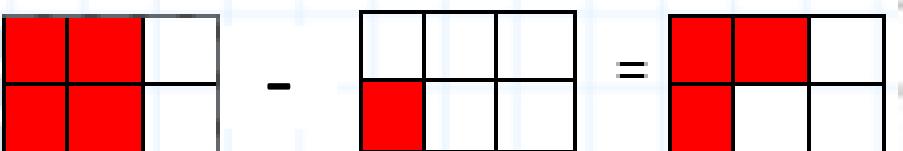
$\times 2$

$$\frac{4}{6} - \frac{1}{6}$$



2) Subtract the numerators, but not the denominators.

$$\frac{4}{6} - \frac{1}{6} = \frac{3}{6}$$



$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

$\div 3$

## Question 16 (sheet 2)

1)  $\frac{10}{27} - \frac{2}{9}$

2)  $\frac{8}{9} - \frac{1}{3}$

3)  $\frac{1}{4} - \frac{1}{8}$

4)  $\frac{5}{6} - \frac{2}{4}$

5)  $\frac{5}{11} - \frac{4}{22}$

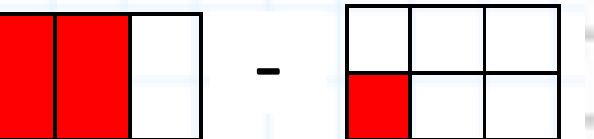
6)  $\frac{4}{5} - \frac{2}{4}$

7)  $\frac{4}{7} - \frac{3}{14}$

8)  $\frac{4}{11} - \frac{2}{22}$

## Subtracting fractions

$$\frac{2}{3} - \frac{1}{6}$$

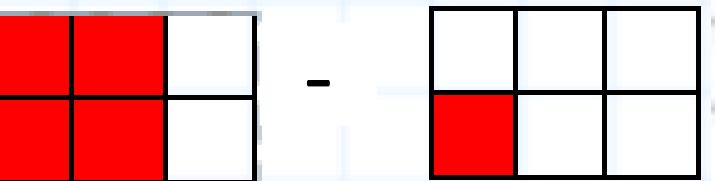


1) Convert both fractions to have the same denominator.

$$\frac{2}{3} - \frac{1}{6}$$

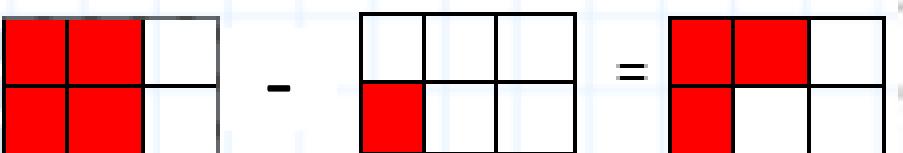
$\times 2$

$$\frac{4}{6} - \frac{1}{6}$$



2) Subtract the numerators, but not the denominators.

$$\frac{4}{6} - \frac{1}{6} = \frac{3}{6}$$



$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

$\div 3$

## Question 16 (sheet 3)

1)  $\frac{8}{11} - \frac{3}{22}$

2)  $\frac{9}{11} - \frac{7}{22}$

3)  $\frac{7}{9} - \frac{2}{3}$

4)  $\frac{7}{28} - \frac{1}{7}$

5)  $\frac{10}{14} - \frac{1}{7}$

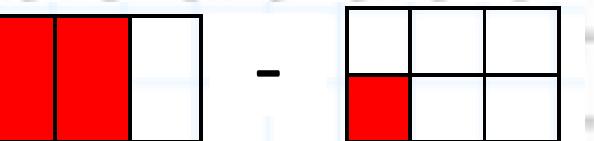
6)  $\frac{4}{5} - \frac{2}{4}$

7)  $\frac{2}{4} - \frac{1}{3}$

8)  $\frac{7}{9} - \frac{12}{27}$

## Subtracting fractions

$$\frac{2}{3} - \frac{1}{6}$$

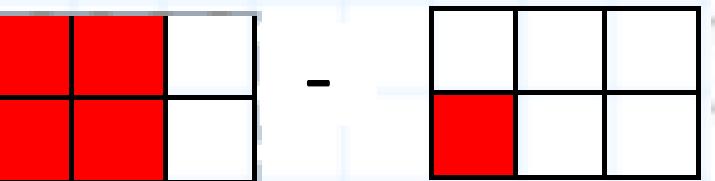


1) Convert both fractions to have the same denominator.

$$\frac{2}{3} - \frac{1}{6}$$

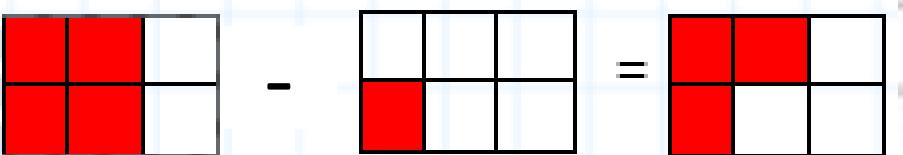
$\times 2$        $\times 2$

$$\frac{4}{6} - \frac{1}{6}$$



2) Subtract the numerators, but not the denominators.

$$\frac{4}{6} - \frac{1}{6} = \frac{3}{6}$$



$\div 3$

$$\frac{3}{6} = \frac{1}{2}$$

$\div 3$

## Question 16 (sheet 4)

1)  $\frac{6}{13} - \frac{7}{26}$

2)  $\frac{8}{16} - \frac{1}{8}$

3)  $\frac{6}{16} - \frac{1}{4}$

4)  $\frac{3}{4} - \frac{3}{14}$

5)  $\frac{4}{9} - \frac{12}{27}$

6)  $\frac{4}{12} - \frac{1}{4}$

7)  $\frac{4}{11} - \frac{1}{22}$

8)  $\frac{4}{9} - \frac{9}{27}$

## Subtracting fractions- Question 16 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $\frac{3}{10}$	1) $\frac{4}{27}$	1) $\frac{13}{22}$	1) $\frac{5}{26}$
2) $\frac{2}{11}$	2) $\frac{5}{9}$	2) $\frac{1}{2}$	2) $\frac{3}{8}$
3) $\frac{8}{15}$	3) $\frac{5}{9}$	3) $\frac{1}{9}$	3) $\frac{1}{8}$
4) $\frac{23}{30}$	4) $\frac{1}{3}$	4) $\frac{3}{28}$	4) $\frac{15}{28}$
5) $\frac{2}{7}$	5) $\frac{3}{11}$	5) $\frac{4}{7}$	5) 0
6) $\frac{1}{4}$	6) $\frac{3}{10}$	6) $\frac{3}{10}$	6) $\frac{1}{12}$
7) $\frac{3}{28}$	7) $\frac{5}{14}$	7) $\frac{1}{6}$	7) $\frac{22}{1}$
8) $\frac{3}{16}$	8) $\frac{3}{11}$	8) $\frac{1}{3}$	8) $\frac{1}{9}$

## Divide fractions by whole numbers

$$5 \frac{3}{4} \div 3$$

1) Change any mixed numbers to improper fractions.

$$\frac{23}{4} \div 3$$

2) Multiply the denominator by the whole number and write the answer as the new denominator.

$$\frac{23}{4} \div 3$$

3) Change any improper fractions back to mixed numbers.

$$\frac{23}{12} = 1 \frac{11}{12}$$

4) Simplify the answer if you can.

## Question 25 (sheet 1)

1)  $3 \frac{2}{5} \div 5$

2)  $1 \frac{2}{3} \div 4$

3)  $3 \frac{1}{6} \div 2$

4)  $4 \frac{2}{5} \div 7$

5)  $2 \frac{3}{7} \div 5$

6)  $3 \frac{2}{9} \div 4$

7)  $1 \frac{2}{5} \div 3$

8)  $3 \frac{1}{5} \div 6$

## Divide fractions by whole numbers

$$5 \frac{3}{4} \div 3$$

1) Change any mixed numbers to improper fractions.

$$\frac{23}{4} \div 3$$

2) Multiply the denominator by the whole number and write the answer as the new denominator.

$$\frac{23}{4} \div 3$$

3) Change any improper fractions back to mixed numbers.

$$\frac{23}{12} = 1 \frac{11}{12}$$

4) Simplify the answer if you can.

## Question 25 (sheet 2)

1)  $2 \frac{2}{7} \div 3$

2)  $3 \frac{1}{3} \div 2$

3)  $3 \frac{1}{5} \div 6$

4)  $1 \frac{2}{8} \div 5$

5)  $2 \frac{3}{7} \div 4$

6)  $2 \frac{2}{3} \div 6$

7)  $5 \frac{2}{5} \div 3$

8)  $3 \frac{1}{5} \div 4$

## Divide fractions by whole numbers

$$5 \frac{3}{4} \div 3$$

1) Change any mixed numbers to improper fractions.

$$\frac{23}{4} \div 3$$

2) Multiply the denominator by the whole number and write the answer as the new denominator.

$$\frac{23}{4} \div 3$$

3) Change any improper fractions back to mixed numbers.

$$\frac{23}{12} = 1 \frac{11}{12}$$

4) Simplify the answer if you can.

## Question 25 (sheet 3)

1)  $4 \frac{2}{7} \div 3$

2)  $3 \frac{1}{3} \div 3$

3)  $4 \frac{1}{5} \div 5$

4)  $2 \frac{1}{8} \div 5$

5)  $3 \frac{3}{7} \div 7$

6)  $1 \frac{2}{3} \div 5$

7)  $2 \frac{1}{5} \div 3$

8)  $3 \frac{3}{5} \div 2$

## Divide fractions by whole numbers

$$5 \frac{3}{4} \div 3$$

1) Change any mixed numbers to improper fractions.

$$\frac{23}{4} \div 3$$

2) Multiply the denominator by the whole number and write the answer as the new denominator.

$$\frac{23}{4} \div 3$$

3) Change any improper fractions back to mixed numbers.

$$\frac{23}{12} = 1 \frac{11}{12}$$

4) Simplify the answer if you can.

## Question 25 (sheet 4)

1)  $2 \frac{2}{7} \div 5$

2)  $6 \frac{1}{3} \div 2$

3)  $4 \frac{2}{5} \div 3$

4)  $4 \frac{1}{6} \div 3$

5)  $3 \frac{3}{8} \div 2$

6)  $8 \frac{2}{3} \div 5$

7)  $4 \frac{1}{5} \div 3$

8)  $6 \frac{3}{5} \div 2$

## Dividing fractions by whole numbers- Question 25 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $\frac{17}{25}$	1) $\frac{16}{21}$	1) $\frac{30}{21}$	1) $\frac{16}{35}$
2) $\frac{5}{12}$	2) $\frac{10}{6}$	2) $\frac{10}{9}$	2) $\frac{19}{6}$
3) $\frac{19}{12}$	3) $\frac{16}{30}$	3) $\frac{21}{20}$	3) $\frac{22}{15}$
4) $\frac{22}{35}$	4) $\frac{10}{40}$	4) $\frac{17}{40}$	4) $\frac{25}{28}$
5) $\frac{17}{35}$	5) $\frac{17}{28}$	5) $\frac{24}{49}$	5) $\frac{27}{16}$
6) $\frac{29}{36}$	6) $\frac{8}{18}$	6) $\frac{5}{15}$	6) $\frac{26}{15}$
7) $\frac{7}{9}$	7) $\frac{27}{15}$	7) $\frac{11}{15}$	7) $\frac{21}{15}$
8) $\frac{16}{30}$	8) $\frac{16}{20}$	8) $\frac{18}{10}$	8) $\frac{33}{10}$

## Multiplying pairs of fractions

$$\frac{3}{4} \times \frac{2}{3}$$

1) Multiply the numerators

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

2) Multiply the denominators

3) Simplify the answer if you can.

$$\frac{6}{12} = \frac{1}{2}$$

## Question 25 (sheet 1)

1)  $\frac{1}{7} \times \frac{3}{5}$

2)  $\frac{7}{10} \times \frac{2}{3}$

3)  $\frac{1}{3} \times \frac{1}{4}$

4)  $\frac{6}{9} \times \frac{1}{2}$

5)  $\frac{5}{6} \times \frac{5}{8}$

6)  $\frac{1}{2} \times \frac{2}{6}$

7)  $\frac{1}{2} \times \frac{3}{9}$

8)  $\frac{1}{8} \times \frac{1}{2}$

## Multiplying pairs of fractions

$$\frac{3}{4} \times \frac{2}{3}$$

1) Multiply the numerators

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

2) Multiply the denominators

$$\frac{6}{12} = \frac{1}{2}$$

3) Simplify the answer if you can.

## Question 25 (sheet 2)

1)  $\frac{2}{8} \times \frac{5}{6}$

2)  $\frac{3}{4} \times \frac{2}{10}$

3)  $\frac{2}{3} \times \frac{3}{8}$

4)  $\frac{1}{2} \times \frac{3}{6}$

5)  $\frac{2}{4} \times \frac{1}{6}$

6)  $\frac{4}{7} \times \frac{4}{6}$

7)  $\frac{2}{9} \times \frac{2}{3}$

8)  $\frac{4}{7} \times \frac{1}{2}$

## Multiplying pairs of fractions

$$\frac{3}{4} \times \frac{2}{3}$$

1) Multiply the numerators

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

2) Multiply the denominators

$$\frac{6}{12} = \frac{1}{2}$$

3) Simplify the answer if you can.

## Question 25 (sheet 3)

1)  $\frac{3}{20} \times \frac{6}{9}$

2)  $\frac{5}{8} \times \frac{16}{20}$

3)  $\frac{1}{2} \times \frac{3}{18}$

4)  $\frac{1}{3} \times \frac{7}{14}$

5)  $\frac{1}{2} \times \frac{1}{4}$

6)  $\frac{2}{16} \times \frac{3}{4}$

7)  $\frac{13}{15} \times \frac{2}{7}$

8)  $\frac{2}{5} \times \frac{2}{3}$

## Multiplying pairs of fractions

$$\frac{3}{4} \times \frac{2}{3}$$

1) Multiply the numerators

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

2) Multiply the denominators

3) Simplify the answer if you can.

$$\frac{6}{12} = \frac{1}{2}$$

## Question 25 (sheet 3)

1)  $\frac{1}{2} \times \frac{7}{9}$

2)  $\frac{11}{20} \times \frac{1}{7}$

3)  $\frac{12}{16} \times \frac{3}{4}$

4)  $\frac{1}{18} \times \frac{1}{5}$

5)  $\frac{16}{20} \times \frac{2}{3}$

6)  $\frac{2}{4} \times \frac{2}{7}$

7)  $\frac{3}{4} \times \frac{1}{3}$

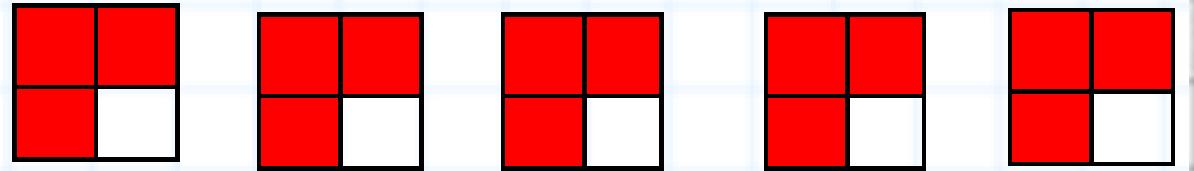
8)  $\frac{2}{6} \times \frac{3}{4}$

## Multiplying pairs of fractions- Question 26 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $\frac{3}{35}$	1) $\frac{10}{48}$	1) $\frac{18}{180}$ or $\frac{1}{10}$	1) $\frac{7}{18}$
2) $\frac{14}{30}$	2) $\frac{6}{40}$	2) $\frac{80}{160}$ or $\frac{1}{2}$	2) $\frac{11}{140}$
3) $\frac{1}{12}$	3) $\frac{6}{24}$	3) $\frac{3}{36}$ or $\frac{1}{12}$	3) $\frac{36}{64}$ or $\frac{9}{16}$
4) $\frac{6}{18}$	4) $\frac{3}{12}$	4) $\frac{7}{42}$ or $\frac{1}{6}$	4) $\frac{1}{90}$
5) $\frac{25}{48}$	5) $\frac{2}{24}$	5) $\frac{1}{8}$	5) $\frac{32}{60}$ or $\frac{8}{15}$
6) $\frac{2}{12}$	6) $\frac{16}{42}$	6) $\frac{6}{64}$ or $\frac{3}{32}$	6) $\frac{4}{28}$ or $\frac{1}{7}$
7) $\frac{3}{18}$	7) $\frac{4}{27}$	7) $\frac{26}{105}$	7) $\frac{3}{12}$ or $\frac{1}{4}$
8) $\frac{1}{6}$	8) $\frac{4}{14}$	8) $\frac{4}{15}$	8) $\frac{6}{24}$ or $\frac{1}{4}$

## Multiplying fractions by whole numbers

$$\frac{3}{4} \times 5$$



1) Write the whole number as a fraction over 1.

$$\frac{3}{4} \times \frac{5}{1}$$

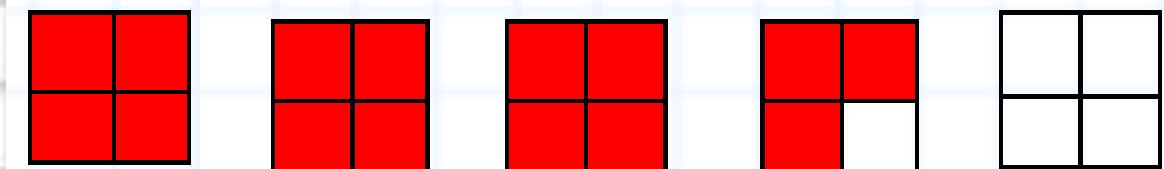
2) Multiply the numerators

$$\frac{3}{4} \times \frac{5}{1} = \frac{15}{4}$$

3) Multiply the denominators

$$\frac{15}{4} = 3\frac{3}{4}$$

4) Change any improper fractions back to mixed numbers.



5) Simplify the answer if you can.

## Question 22 (sheet 1)

1)  $\frac{1}{2} \times 4$

2)  $\frac{1}{3} \times 3$

3)  $\frac{1}{3} \times 5$

4)  $\frac{1}{6} \times 5$

5)  $\frac{1}{4} \times 3$

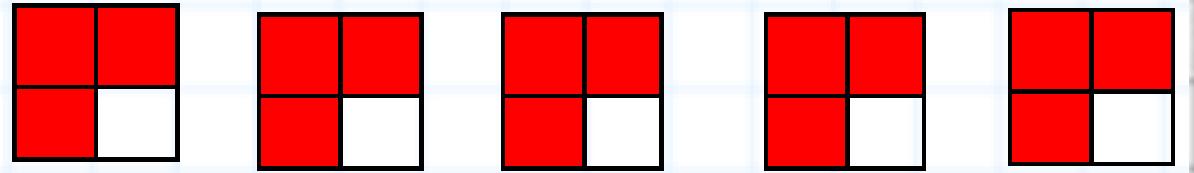
6)  $\frac{1}{8} \times 3$

7)  $\frac{1}{5} \times 2$

8)  $\frac{1}{2} \times 2$

## Multiplying fractions by whole numbers

$$\frac{3}{4} \times 5$$



1) Write the whole number as a fraction over 1.

$$\frac{3}{4} \times \frac{5}{1}$$

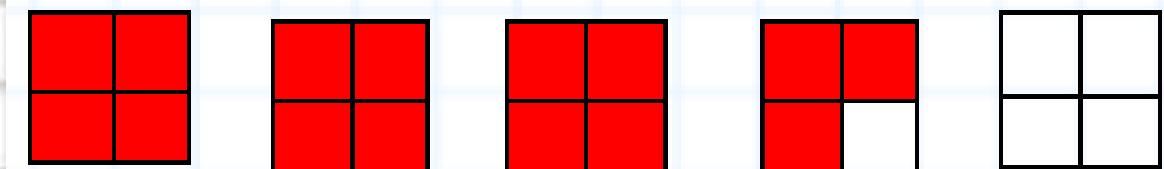
2) Multiply the numerators

$$\frac{3}{4} \times \frac{5}{1} = \frac{15}{4}$$

3) Multiply the denominators

$$\frac{15}{4} = 3\frac{3}{4}$$

4) Change any improper fractions back to mixed numbers.



5) Simplify the answer if you can.

## Question 22 (sheet 2)

1)  $\frac{1}{4} \times 4$

2)  $\frac{1}{2} \times 3$

3)  $\frac{1}{2} \times 6$

4)  $\frac{1}{8} \times 9$

5)  $\frac{1}{3} \times 7$

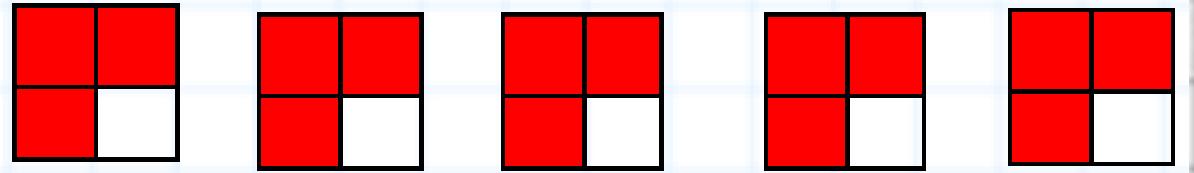
6)  $\frac{1}{10} \times 7$

7)  $\frac{1}{4} \times 9$

8)  $\frac{1}{8} \times 5$

## Multiplying fractions by whole numbers

$$\frac{3}{4} \times 5$$



1) Write the whole number as a fraction over 1.

$$\frac{3}{4} \times \frac{5}{1}$$

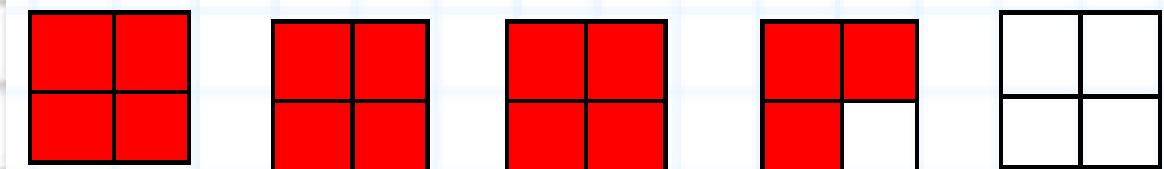
2) Multiply the numerators

$$\frac{3}{4} \times \frac{5}{1} = \frac{15}{4}$$

3) Multiply the denominators

$$\frac{15}{4} = 3\frac{3}{4}$$

4) Change any improper fractions back to mixed numbers.



5) Simplify the answer if you can.

## Question 22 (sheet 3)

1)  $\frac{1}{5} \times 12$

2)  $\frac{1}{6} \times 6$

3)  $\frac{1}{4} \times 8$

4)  $\frac{1}{9} \times 12$

5)  $\frac{1}{2} \times 7$

6)  $\frac{2}{3} \times 8$

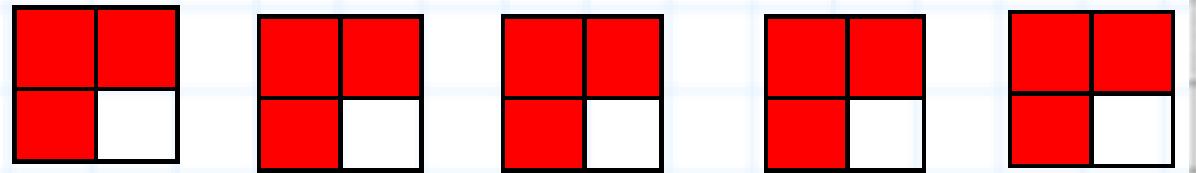
7)  $\frac{2}{3} \times 4$

8)  $\frac{5}{6} \times 9$

## Multiplying fractions by whole numbers

$$\frac{3}{4} \times$$

5



1) Write the whole number as a fraction over 1.

$$\frac{3}{4} \times \frac{5}{1}$$

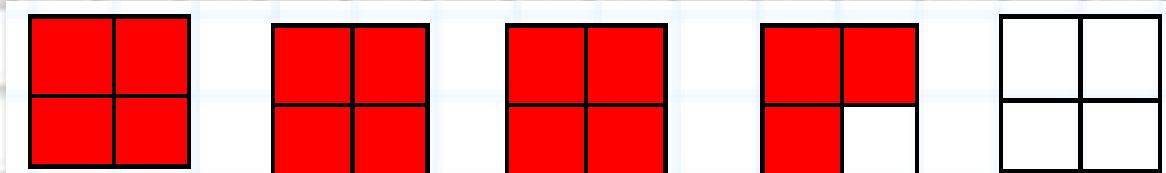
2) Multiply the numerators

$$\frac{3}{4} \times \frac{5}{1} = \frac{15}{4}$$

3) Multiply the denominators

$$\frac{1}{4} \times 5 = 3\frac{3}{4}$$

4) Change any improper fractions back to mixed numbers.



5) Simplify the answer if you can.

## Question 22 (sheet 4)

1)  $\frac{2}{3} \times 4$

2)  $\frac{5}{6} \times 9$

3)  $\frac{3}{4} \times 5$

4)  $\frac{5}{8} \times 4$

5)  $\frac{3}{5} \times 3$

6)  $\frac{1}{2} \times 6$

7)  $\frac{2}{4} \times 6$

8)  $\frac{4}{8} \times 7$

## Multiplying fractions by whole numbers- Question 22 (ANSWERS)

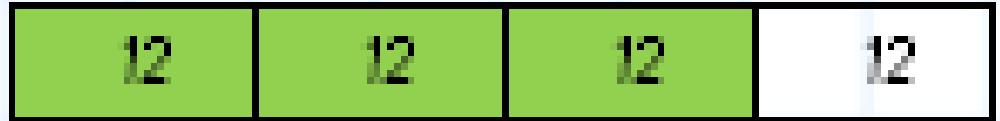
Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) $\frac{4}{2}$ or 2	1) $\frac{4}{4}$ or 1	1) $\frac{12}{5}$ or $2\frac{2}{5}$	1) $\frac{8}{3}$ or $2\frac{2}{3}$
2) $\frac{3}{3}$ or 1	2) $\frac{3}{2}$ or $1\frac{1}{2}$	2) $\frac{6}{6}$ or 1	2) $\frac{45}{6}$ or $7\frac{1}{2}$
3) $\frac{5}{3}$ or $1\frac{2}{3}$	3) $\frac{6}{2}$ or 3	3) $\frac{8}{4}$ or 2	3) $\frac{15}{4}$ or $3\frac{3}{4}$
4) $\frac{5}{6}$	4) $\frac{9}{8}$ or $1\frac{1}{8}$	4) $\frac{12}{9}$ or $1\frac{1}{3}$	4) $\frac{20}{8}$ or $2\frac{1}{2}$
5) $\frac{3}{4}$	5) $\frac{7}{3}$ or $2\frac{1}{3}$	5) $\frac{7}{2}$ or $3\frac{1}{2}$	5) $\frac{9}{5}$ or $1\frac{4}{5}$
6) $\frac{3}{8}$	6) $\frac{7}{10}$	6) $\frac{16}{3}$ or $5\frac{1}{3}$	6) $\frac{6}{2}$ or 3
7) $\frac{2}{5}$	7) $\frac{9}{4}$ or $2\frac{1}{4}$	7) $\frac{8}{3}$ or $2\frac{2}{3}$	7) $\frac{12}{4}$ o 3
8) $\frac{2}{2}$ or 1	8) $\frac{5}{8}$	8) $\frac{45}{6}$ or $7\frac{1}{2}$	8) $\frac{28}{8}$ or $3\frac{1}{2}$

## Find fractions of numbers

$$\frac{3}{4} \text{ of } 48$$

1) Divide the whole number by the denominator.  
 $(48 \div 4 = 12)$

2) Multiply the answer by the numerator  
 $(12 \times 3 = 36)$



$$48 \div 4 = 12$$

dividing by 4 finds one quarter.

$$12 \times 3 = 36$$

multiplying by 3 finds 3 quarters

## Question 30 (sheet 1)

1)  $\frac{1}{8}$  of 72

2)  $\frac{1}{9}$  of 54

3)  $\frac{1}{4}$  of 52

4)  $\frac{1}{5}$  of 175

5)  $\frac{1}{6}$  of 300

6)  $\frac{1}{10}$  of 100

7)  $\frac{3}{4}$  of 100

8)  $\frac{2}{5}$  of 25

## Find fractions of numbers

$$\frac{3}{4} \text{ of } 48$$

1) Divide the whole number by the denominator.  
 $(48 \div 4 = 12)$

2) Multiply the answer by the numerator  
 $(12 \times 3 = 36)$



$$48 \div 4 = 12$$

dividing by 4 finds one quarter.

$$12 \times 3 = 36$$

multiplying by 3 finds 3 quarters

## Question 30 (sheet 2)

1)  $\frac{5}{9}$  of 36

2)  $\frac{3}{4}$  of 56

3)  $\frac{4}{5}$  of 100

4)  $\frac{2}{3}$  of 210

5)  $\frac{1}{5}$  of 250

6)  $\frac{1}{2}$  of 84

7)  $\frac{1}{7}$  of 140

8)  $\frac{1}{8}$  of 64

## Find fractions of numbers

$$\frac{3}{4} \text{ of } 48$$

1) Divide the whole number by the denominator.  
 $(48 \div 4 = 12)$

2) Multiply the answer by the numerator  
 $(12 \times 3 = 36)$



$$48 \div 4 = 12$$

dividing by 4 finds one quarter.

$$12 \times 3 = 36$$

multiplying by 3 finds 3 quarters

## Question 30 (sheet 3)

1)  $\frac{1}{9}$  of 81

2)  $\frac{1}{5}$  of 55

3)  $\frac{2}{3}$  of 75

4)  $\frac{5}{8}$  of 40

5)  $\frac{2}{3}$  of 225

6)  $\frac{5}{7}$  of 133

7)  $\frac{2}{10}$  of 100

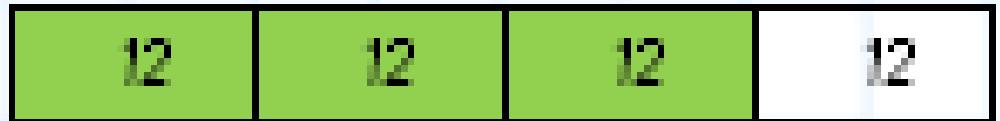
8)  $\frac{4}{9}$  of 90

## Find fractions of numbers

$$\frac{3}{4} \text{ of } 48$$

1) Divide the whole number by the denominator.  
 $(48 \div 4 = 12)$

2) Multiply the answer by the numerator  
 $(12 \times 3 = 36)$



$$48 \div 4 = 12$$

dividing by 4 finds one quarter.

$$12 \times 3 = 36$$

multiplying by 3 finds 3 quarters

## Question 30 (sheet 4)

1)  $\frac{7}{8} \text{ of } 72$

2)  $\frac{3}{8} \text{ of } 64$

3)  $\frac{2}{3} \text{ of } 180$

4)  $\frac{5}{6} \text{ of } 120$

5)  $\frac{2}{3} \text{ of } 27$

6)  $\frac{4}{7} \text{ of } 42$

7)  $\frac{1}{7} \text{ of } 140$

8)  $\frac{1}{2} \text{ of } 114$

## Find fractions of numbers- Question 30 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 63	1) 20	1) 9	1) 63
2) 39	2) 42	2) 11	2) 24
3) 13	3) 80	3) 50	3) 120
4) 35	4) 140	4) 25	4) 100
5) 50	5) 50	5) 150	5) 18
6) 10	6) 42	6) 95	6) 24
7) 75	7) 20	7) 20	7) 20
8) 10	8) 8	8) 40	8) 57

## Finding the whole from a fraction

$\frac{3}{4}$  of \_\_\_ is 18



18

1) Divide the whole number by the numerator.

This shows what one 'part' is worth

$$(18 \div 3 = 6)$$

2) Multiply the answer by the denominator  
( $6 \times 4 = 24$ ). This shows what the whole number is.

## Question 34 (sheet 1)

1)  $\frac{3}{4}$  of \_\_\_ is 36

2)  $\frac{2}{5}$  of \_\_\_ is 12

3)  $\frac{2}{9}$  of \_\_\_ is 6

4)  $\frac{5}{8}$  of \_\_\_ is 15

5)  $\frac{7}{8}$  of \_\_\_ is 42

6)  $\frac{3}{8}$  of \_\_\_ is 15

7)  $\frac{2}{3}$  of \_\_\_ is 8

8)  $\frac{7}{9}$  of \_\_\_ is 14

## Finding the whole from a fraction

$\frac{3}{4}$  of \_\_\_ is 18



1) Divide the whole number by the numerator.  
This shows what one 'part' is worth  
( $18 \div 3 = 6$ )

2) Multiply the answer by the denominator  
( $6 \times 4 = 24$ ). This shows what the whole number is.

## Question 34 (sheet 2)

1)  $\frac{2}{3}$  of \_\_\_ is 18

2)  $\frac{3}{5}$  of \_\_\_ is 12

3)  $\frac{5}{9}$  of \_\_\_ is 10

4)  $\frac{7}{8}$  of \_\_\_ is 49

5)  $\frac{7}{10}$  of \_\_\_ is 42

6)  $\frac{3}{7}$  of \_\_\_ is 15

7)  $\frac{2}{5}$  of \_\_\_ is 8

8)  $\frac{7}{11}$  of \_\_\_ is 14

## Finding the whole from a fraction

$\frac{3}{4}$  of \_\_\_ is 18



1) Divide the whole number by the numerator.  
This shows what one 'part' is worth  
( $18 \div 3 = 6$ )

2) Multiply the answer by the denominator  
( $6 \times 4 = 24$ ). This shows what the whole number is.

## Question 34 (sheet 3)

1)  $\frac{3}{5}$  of \_\_\_ is 18

2)  $\frac{3}{7}$  of \_\_\_ is 12

3)  $\frac{2}{9}$  of \_\_\_ is 10

4)  $\frac{7}{12}$  of \_\_\_ is 49

5)  $\frac{7}{10}$  of \_\_\_ is 35

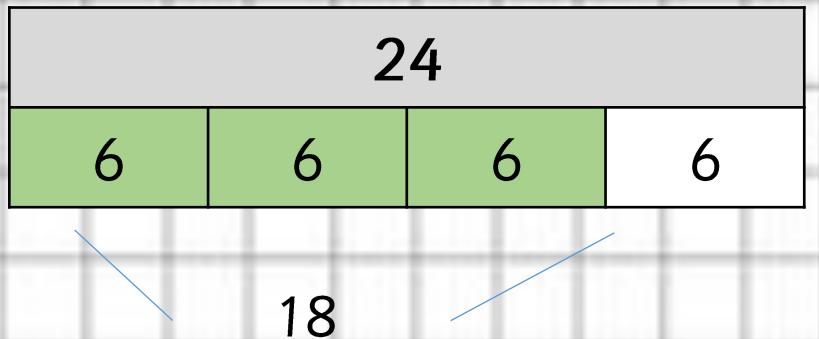
6)  $\frac{3}{7}$  of \_\_\_ is 21

7)  $\frac{3}{5}$  of \_\_\_ is 9

8)  $\frac{2}{11}$  of \_\_\_ is 24

## Finding the whole from a fraction

$\frac{3}{4}$  of \_\_\_ is 18



1) Divide the whole number by the numerator.  
This shows what one 'part' is worth  
( $18 \div 3 = 6$ )

2) Multiply the answer by the denominator  
( $6 \times 4 = 24$ ). This shows what the whole number is.

## Question 34 (sheet 4)

1)  $\frac{3}{7}$  of \_\_\_ is 24

2)  $\frac{5}{7}$  of \_\_\_ is 15

3)  $\frac{4}{7}$  of \_\_\_ is 20

4)  $\frac{7}{12}$  of \_\_\_ is 56

5)  $\frac{8}{11}$  of \_\_\_ is 40

6)  $\frac{6}{7}$  of \_\_\_ is 24

7)  $\frac{3}{10}$  of \_\_\_ is 15

8)  $\frac{4}{11}$  of \_\_\_ is 8

Finding the whole number from a fraction- Question 34 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 48	1) 27	1) 30	1) 56
2) 30	2) 20	2) 28	2) 21
3) 27	3) 18	3) 45	3) 35
4) 24	4) 56	4) 84	4) 96
5) 48	5) 60	5) 50	5) 55
6) 40	6) 35	6) 49	6) 28
7) 12	7) 20	7) 15	7) 50
8) 18	8) 22	8) 132	8) 22

## Missing number questions (addition symbol)

$$\underline{74} + 69 = 143$$

$$88 + \underline{92} = 180$$

$$143 - 69 = 74$$

$$180 - 88 = 92$$

143	
69	74

180	
88	92

1) Take **one of the numbers that you know** away from **the total** to find the **other missing number**.

## Question 3 (sheet 1)

1)  $84 + \underline{\quad} = 97$

2)  $\underline{\quad} + 41 = 60$

3)  $94 + \underline{\quad} = 171$

4)  $40 + \underline{\quad} = 111$

5)  $93 + \underline{\quad} = 113$

6)  $\underline{\quad} + 63 = 131$

7)  $\underline{\quad} + 59 = 101$

8)  $55 + \underline{\quad} = 95$

## Missing number questions (addition symbol)

$$\underline{74} + 69 = 143$$

$$88 + \underline{92} = 180$$

$$143 - 69 = 74$$

$$180 - 88 = 92$$

143	
69	74

180	
88	92

1) Take **one of the numbers that you know** away from **the total** to find the **other missing number**.

## Question 3 (sheet 2)

1)  $75 + \underline{\quad} = 143$

2)  $92 + \underline{\quad} = 120$

3)  $44 + \underline{\quad} = 115$

4)  $\underline{\quad} + 33 = 107$

5)  $\underline{\quad} + 83 = 102$

6)  $\underline{\quad} + 37 = 58$

7)  $\underline{\quad} + 61 = 132$

8)  $38 + \underline{\quad} = 55$

## Missing number questions (addition symbol)

$$\underline{74} + 69 = 143$$

$$88 + \underline{92} = 180$$

$$143 - 69 = 74$$

$$180 - 88 = 92$$

143	
69	74

180	
88	92

1) Take **one of the numbers that you know** away from **the total** to find the **other missing number**.

## Question 3 (sheet 3)

1)  $\underline{\quad} + 23 = 60$

2)  $\underline{\quad} + 59 = 97$

3)  $\underline{\quad} + 15 = 65$

4)  $77 + \underline{\quad} = 90$

5)  $\underline{\quad} + 82 = 158$

6)  $88 + \underline{\quad} = 185$

7)  $28 + \underline{\quad} = 112$

8)  $\underline{\quad} + 91 = 175$

## Missing number questions (addition symbol)

$$\underline{74} + 69 = 143$$

$$88 + \underline{92} = 180$$

$$143 - 69 = 74$$

$$180 - 88 = 92$$

143	
69	74

180	
88	92

1) Take **one of the numbers that you know** away from **the total** to find the **other missing number**.

## Question 3 (sheet 4)

1)  $31 + \underline{\quad} = 73$

2)  $\underline{\quad} + 34 = 80$

3)  $\underline{\quad} + 12 = 87$

4)  $\underline{\quad} + 30 = 104$

5)  $74 + \underline{\quad} = 98$

6)  $\underline{\quad} + 44 = 102$

7)  $41 + \underline{\quad} = 72$

8)  $12 + \underline{\quad} = 27$

## Missing number questions (addition symbol)- Question 3 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 13	1) 143	1) 37	1) 42
2) 19	2) 28	2) 38	2) 46
3) 77	3) 115	3) 50	3) 75
4) 71	4) 74	4) 13	4) 74
5) 20	5) 19	5) 76	5) 24
6) 68	6) 21	6) 97	6) 58
7) 42	7) 71	7) 84	7) 31
8) 40	8) 17	8) 84	8) 15

## Missing number questions (subtraction symbol)

$$81 - \underline{\quad} = 49$$

81
49

If you know the total, subtract the smaller number from it.

$$81 - 49 = 32$$

$$81 - \underline{32} = 49$$

81	
32	49

$$\underline{\quad} - 76 = 15$$

76	15

If you do not know the total, add the 2 values that you know together.

$$76 + 15 = 91$$

$$\underline{91} - 76 = 15$$

91	
76	15

## Question 4 (sheet 1)

$$1) \underline{\quad} - 73 = 17$$

$$2) \underline{\quad} - 39 = 28$$

$$3) \underline{\quad} - 62 = 29$$

$$4) \underline{\quad} - 57 = 19$$

$$5) 43 - \underline{\quad} = 33$$

$$6) \underline{\quad} - 49 = 11$$

$$7) 91 - \underline{\quad} = 22$$

$$8) 88 - \underline{\quad} = 27$$

## Missing number questions (subtraction symbol)

$$81 - \underline{\quad} = 49$$

81
49

If you know the total, subtract the smaller number from it.

$$81 - 49 = 32$$

$$81 - \underline{32} = 49$$

81	
32	49

$$\underline{\quad} - 76 = 15$$

76	15

If you do not know the total, add the 2 values that you know together.

$$76 + 15 = 91$$

$$\underline{91} - 76 = 15$$

91	
76	15

## Question 4 (sheet 2)

$$1) 74 - \underline{\quad} = 63$$

$$2) 99 - \underline{\quad} = 9$$

$$3) 54 - \underline{\quad} = 33$$

$$4) 91 - \underline{\quad} = 41$$

$$5) \underline{\quad} - 69 = 9$$

$$6) 61 - \underline{\quad} = 34$$

$$7) 60 - \underline{\quad} = 39$$

$$8) \underline{\quad} - 86 = 12$$

## Missing number questions (subtraction symbol)

$$81 - \underline{\quad} = 49$$

81
49

If you know the total, subtract the smaller number from it.

$$81 - 49 = 32$$

$$81 - \underline{32} = 49$$

81	
32	49

$$\underline{\quad} - 76 = 15$$

76	15

If you do not know the total, add the 2 values that you know together.

$$76 + 15 = 91$$

$$\underline{91} - 76 = 15$$

91	
76	15

## Question 4 (sheet 3)

$$1) 55 - \underline{\quad} = 31$$

$$2) 94 - \underline{\quad} = 28$$

$$3) \underline{\quad} - 34 = 18$$

$$4) \underline{\quad} - 47 = 17$$

$$5) \underline{\quad} - 46 = 24$$

$$6) \underline{\quad} - 10 = 44$$

$$7) \underline{\quad} - 10 = 19$$

$$8) 40 - \underline{\quad} = 8$$

## Missing number questions (subtraction symbol)

$$81 - \underline{\quad} = 49$$

81
49

If you know the total, subtract the smaller number from it.

$$81 - 49 = 32$$

$$81 - \underline{32} = 49$$

81	
32	49

$$\underline{\quad} - 76 = 15$$

76	15

If you do not know the total, add the 2 values that you know together.

$$76 + 15 = 91$$

$$\underline{91} - 76 = 15$$

91	
76	15

## Question 4 (sheet 3)

$$1) \underline{\quad} - 63 = 12$$

$$2) \underline{\quad} - 69 = 8$$

$$3) \underline{\quad} - 42 = 54$$

$$4) \underline{\quad} - 13 = 69$$

$$5) 69 - \underline{\quad} = 44$$

$$6) 89 - \underline{\quad} = 28$$

$$7) 78 - \underline{\quad} = 9$$

$$8) \underline{\quad} - 55 = 11$$

## Missing number questions (subtraction symbol)- Question 4 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 90	1) 11	1) 24	1) 75
2) 67	2) 90	2) 66	2) 77
3) 91	3) 21	3) 52	3) 96
4) 76	4) 50	4) 64	4) 82
5) 10	5) 78	5) 70	5) 25
6) 60	6) 27	6) 54	6) 61
7) 69	7) 31	7) 29	7) 69
8) 61	8) 98	8) 32	8) 66

## Missing number questions (multiplication symbol)

$$\underline{\quad} \times 36 = 3240$$

$$416 = \underline{\quad} \times 13$$

1) Divide the **total** by **one of the values** to find the **other value**.

2) Check by multiplying the 2 smaller values together. If your answer is the total, you are correct!

$$3240 \div 36 = 90$$

$$416 \div 13 = 32$$

$$\underline{90} \times 36 = 3240$$

$$416 = \underline{32} \times 13$$

## Question 36 (sheet 1)

$$1) 27 \times \underline{\quad} = 702$$

$$2) 572 = \underline{\quad} \times 26$$

$$3) \underline{\quad} \times 7 = 154$$

$$4) 208 = 26 \times \underline{\quad}$$

$$5) \underline{\quad} \times 21 = 210$$

$$6) \underline{\quad} \times 15 = 195$$

$$7) 15 \times \underline{\quad} = 135$$

$$8) 240 = \underline{\quad} \times 16$$

## Missing number questions (multiplication symbol)

$$\underline{\quad} \times 36 = 3240$$

$$416 = \underline{\quad} \times 13$$

- 1) Divide the **total** by **one of the values** to find **the other value**.
- 2) Check by multiplying the 2 smaller values together. If your answer is the total, you are correct!

$$3240 \div 36 = 90$$

$$416 \div 13 = 32$$

$$\underline{90} \times 36 = 3240$$

$$416 = \underline{32} \times 13$$

## Question 36 (sheet 2)

$$1) \underline{\quad} \times 23 = 115$$

$$2) 420 = \underline{\quad} \times 20$$

$$3) 26 \times \underline{\quad} = 780$$

$$4) 425 = 25 \times \underline{\quad}$$

$$5) 315 = 15 \times \underline{\quad}$$

$$6) 7 \times \underline{\quad} = 126$$

$$7) 70 = \underline{\quad} \times 10$$

$$8) 96 = 12 \times \underline{\quad}$$

## Missing number questions (multiplication symbol)

$$\underline{\quad} \times 36 = 3240$$

$$416 = \underline{\quad} \times 13$$

1) Divide the **total** by **one of the values** to find the **other value**.

2) Check by multiplying the 2 smaller values together. If your answer is the total, you are correct!

$$3240 \div 36 = 90$$

$$416 \div 13 = 32$$

$$\underline{90} \times 36 = 3240$$

$$416 = \underline{32} \times 13$$

## Question 36 (sheet 3)

$$1) \underline{\quad} \times 19 = 570$$

$$2) 11 \times \underline{\quad} = 242$$

$$3) 152 = \underline{\quad} \times 14$$

$$4) \underline{\quad} \times 10 = 120$$

$$5) 570 = \underline{\quad} \times 19$$

$$6) 18 \times \underline{\quad} = 414$$

$$7) \underline{\quad} \times 15 = 270$$

$$8) 88 = \underline{\quad} \times 8$$

## Missing number questions (multiplication symbol)

$$\underline{\quad} \times 36 = 3240$$

$$416 = \underline{\quad} \times 13$$

1) Divide the **total** by **one of the values** to find the **other value**.

2) Check by multiplying the 2 smaller values together. If your answer is the total, you are correct!

$$3240 \div 36 = 90$$

$$416 \div 13 = 32$$

$$\underline{90} \times 36 = 3240$$

$$416 = \underline{32} \times 13$$

## Question 36 (sheet 4)

$$1) 15 \times \underline{\quad} = 420$$

$$2) 192 = \underline{\quad} \times 24$$

$$3) 27 \times \underline{\quad} = 216$$

$$4) \underline{\quad} \times 6 = 90$$

$$5) 8 \times \underline{\quad} = 208$$

$$6) 270 = \underline{\quad} \times 10$$

$$7) \underline{\quad} \times 30 = 840$$

$$8) 638 = 29 \times \underline{\quad}$$

## Missing number questions (multiplication symbol)- Question 36 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 26	1) 5	1) 30	1) 18
2) 22	2) 21	2) 22	2) 8
3) 22	3) 30	3) 18	3) 8
4) 8	4) 17	4) 12	4) 15
5) 10	5) 21	5) 30	5) 26
6) 13	6) 18	6) 23	6) 27
7) 9	7) 7	7) 18	7) 28
8) 15	8) 8	8) 11	8) 22

## Missing number questions (division symbol)

$$20 = 100 \div \underline{5}$$

- 1) If you know what **the biggest value** is, divide it by **one of the smaller values**.

$$100 \div 20 = 5$$

- 2) Check that your answer fits.

$$\underline{100} \div 4 = 25$$

- 1) If you don't know what **the biggest value** is, multiply the two smaller values together.

$$4 \times 25 = 100$$

- 2) Check that your answer fits.

## Question 35 (sheet 1)

- 1)  $\underline{\quad} \div 18 = 7$
- 2)  $4 = 80 \div \underline{\quad}$
- 3)  $\underline{\quad} \div 19 = 2$
- 4)  $4 = \underline{\quad} \div 17$
- 5)  $\underline{\quad} \div 17 = 3$
- 6)  $4 = 56 \div \underline{\quad}$
- 7)  $104 \div 13 = \underline{\quad}$
- 8)  $\underline{\quad} = 52 \div 13$
- 9)  $4 = \underline{\quad} \div 20$
- 10)  $95 \div 19 = \underline{\quad}$

## Missing number questions (division symbol)

$$20 = 100 \div \underline{\quad} \textcolor{red}{5}$$

- 1) If you know what **the biggest value** is, divide it by **one of the smaller values**.

$$100 \div 20 = \textcolor{red}{5}$$

- 2) Check that your answer fits.

$$\underline{100} \div \textcolor{blue}{4} = \textcolor{green}{25}$$

- 1) If you don't know what **the biggest value** is, multiply the two smaller values together.

$$4 \times \textcolor{green}{25} = \textcolor{red}{100}$$

- 2) Check that your answer fits.

## Question 35 (sheet 2)

$$1) 24 \div \underline{\quad} = 2$$

$$2) 90 \div \underline{\quad} = 6$$

$$3) 9 = \underline{\quad} \div 18$$

$$4) 7 = 112 \div \underline{\quad}$$

$$5) 119 \div \underline{\quad} = 7$$

$$6) \underline{\quad} \div 19 = 1$$

$$7) 117 \div \underline{\quad} = 9$$

$$8) 95 \div \underline{\quad} = 5$$

$$9) 55 \div \underline{\quad} = 5$$

$$10) \underline{\quad} \div 14 = 4$$

## Missing number questions (division symbol)

$$20 = 100 \div \underline{\hspace{1cm}} 5$$

- 1) If you know what **the biggest value** is, divide it by **one of the smaller values**.

$$100 \div 20 = 5$$

- 2) Check that your answer fits.

$$\underline{\hspace{1cm}} 100 \div 4 = 25$$

- 1) If you don't know what **the biggest value** is, multiply the two smaller values together.

$$4 \times 25 = 100$$

- 2) Check that your answer fits.

## Question 35 (sheet 3)

- 1)  $\underline{\hspace{1cm}} \div 18 = 5$
- 2)  $10 = 180 \div \underline{\hspace{1cm}}$
- 3)  $\underline{\hspace{1cm}} \div 19 = 6$
- 4)  $114 \div 19 = \underline{\hspace{1cm}}$
- 5)  $30 \div \underline{\hspace{1cm}} = 2$
- 6)  $60 \div \underline{\hspace{1cm}} = 3$
- 7)  $108 \div \underline{\hspace{1cm}} = 6$
- 8)  $40 \div \underline{\hspace{1cm}} = 2$
- 9)  $1 = \underline{\hspace{1cm}} \div 19$
- 10)  $95 \div \underline{\hspace{1cm}} = 5$

## Missing number questions (division symbol)

$$20 = 100 \div \underline{\hspace{1cm}} 5$$

- 1) If you know what **the biggest value** is, divide it by **one of the smaller values**.

$$100 \div 20 = 5$$

- 2) Check that your answer fits.

$$\underline{100} \div 4 = 25$$

- 1) If you don't know what **the biggest value** is, multiply the two smaller values together.

$$4 \times 25 = 100$$

- 2) Check that your answer fits.

## Question 35 (sheet 3)

- 1)  $96 \div \underline{\hspace{1cm}} - 8$
- 2)  $4 = \underline{\hspace{1cm}} \div 19$
- 3)  $128 \div 16 = \underline{\hspace{1cm}}$
- 4)  $2 = \underline{\hspace{1cm}} \div 17$
- 5)  $88 \div \underline{\hspace{1cm}} = 8$
- 6)  $98 \div 14 = \underline{\hspace{1cm}}$
- 7)  $\underline{\hspace{1cm}} = 90 \div 18$
- 8)  $108 \div \underline{\hspace{1cm}} = 6$
- 9)  $75 \div \underline{\hspace{1cm}} = 5$
- 10)  $85 \div 17 = \underline{\hspace{1cm}}$

## Missing number questions (division symbol)- Question 35 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 126	1) 12	1) 90	1) 12
2) 20	2) 15	2) 18	2) 76
3) 28	3) 162	3) 114	3) 8
4) 68	4) 16	4) 6	4) 34
5) 51	5) 17	5) 15	5) 11
6) 14	6) 19	6) 20	6) 7
7) 8	7) 13	7) 18	7) 5
8) 4	8) 19	8) 20	8) 18
9) 80	9) 11	9) 19	9) 15
10) 5	10) 56	10) 19	10) 5

## Using multiplication facts

Use your knowledge of place value to help you with multiplying, e.g.

If  $3 \times 2 = 6$ , then

$$3 \times 20 = 60$$

$$30 \times 2 = 60$$

$$30 \times 20 = 600$$

Use your knowledge of place value to help you with division, e.g.

If  $42 \div 6 = 7$ , then

$$420 \div 6 = 70$$

$$420 \div 60 = 7$$

$$4,200 \div 60 = 70$$

## Question 5 (sheet 1)

1)  $60 \times 6$

2)  $560 \div 7$

3)  $7 \times 90$

4)  $150 \div 3$

5)  $550 \div 5$

6)  $80 \times 7$

7)  $4 \times 60$

8)  $450 \div 9$

## Using multiplication facts

Use your knowledge of place value to help you with multiplying, e.g.

If  $3 \times 2 = 6$ , then

$$3 \times 20 = 60$$

$$30 \times 2 = 60$$

$$30 \times 20 = 600$$

Use your knowledge of place value to help you with division, e.g.

If  $42 \div 6 = 7$ , then

$$420 \div 6 = 70$$

$$420 \div 60 = 7$$

$$4,200 \div 60 = 70$$

## Question 5 (sheet 2)

1)  $450 \div 9$

2)  $110 \times 11$

3)  $330 \div 11$

4)  $960 \div 12$

5)  $12 \times 60$

6)  $60 \times 8$

7)  $560 \div 7$

8)  $90 \times 4$

## Using multiplication facts

Use your knowledge of place value to help you with multiplying, e.g.

If  $3 \times 2 = 6$ , then

$$3 \times 20 = 60$$

$$30 \times 2 = 60$$

$$30 \times 20 = 600$$

Use your knowledge of place value to help you with division, e.g.

If  $42 \div 6 = 7$ , then

$$420 \div 6 = 70$$

$$420 \div 60 = 7$$

$$4,200 \div 60 = 70$$

## Question 5 (sheet 3)

1)  $630 \div 9$

2)  $11 \times 30$

3)  $700 \div 10$

4)  $60 \times 9$

5)  $9 \times 110$

6)  $720 \div 8$

7)  $990 \div 9$

8)  $5 \times 700$

## Using multiplication facts

Use your knowledge of place value to help you with multiplying, e.g.

If  $3 \times 2 = 6$ , then

$$3 \times 20 = 60$$

$$30 \times 2 = 60$$

$$30 \times 20 = 600$$

Use your knowledge of place value to help you with division, e.g.

If  $42 \div 6 = 7$ , then

$$420 \div 6 = 70$$

$$420 \div 60 = 7$$

$$4,200 \div 60 = 70$$

## Question 5 (sheet 4)

1)  $5 \times 700$

2)  $1440 \div 12$

3)  $560 \div 7$

4)  $8 \times 800$

5)  $30 \times 50$

6)  $3200 \div 4$

7)  $4200 \div 60$

8)  $7 \times 900$

## Using multiplication facts - Question 5 (ANSWERS)

Sheet 1	Sheet 2	Sheet 3	Sheet 4
1) 1360	1) 90	1) 970	1) 3500
2) 80	2) 10	2) 330	2) 120
3) 630	3) 30	3) 70	3) 80
4) 50	4) 80	4) 540	4) 6400
5) 110	5) 720	5) 990	5) 1500
6) 560	6) 480	6) 90	6) 800
7) 240	7) 80	7) 110	7) 70
8) 50	8) 360	8) 3500	8) 6300