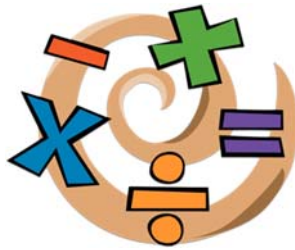




**St Andrew's Academy**

**Mathematics Department**



***S1 BLOCK 1***

***Number***

# Words and Figures 1

Question 1: Write these numbers in words

- (a) 19      (b) 28      (c) 72  
(d) 55      (e) 83      (f) 94

Question 2: Write these numbers in Figures

- (a) Eighteen      (b) thirty-one      (c) forty-nine  
(d) Fifty-two      (e) eighty-seven      (f) ninety-three

Question 3: Write these numbers in words

- (a) 105      (b) 112      (c) 140  
(d) 168      (e) 271      (f) 333  
(g) 498      (h) 704      (i) 620  
(j) 857      (k) 985      (l) 586

Question 4: Write these numbers in Figures

- (a) two hundred and one      (b) one hundred and twenty-nine  
(c) six hundred and forty      (d) nine hundred and eleven  
(e) four hundred and Fifty-two      (f) eight hundred and seventy-Dive

Question 5: Write these numbers in words

- (a) 2004      (b) 3058      (c) 8020  
(d) 9105      (e) 4700      (f) 2831  
(g) 8349      (h) 10010      (i) 15512  
(j) 23061      (k) 52724      (l) 89200

Question 6: Write these numbers in Figures

- (a) Five thousand, one hundred  
(b) two thousand, nine hundred and Five  
(c) nine thousand, Five hundred and thirty-seven  
(d) eight thousand and thirty  
(e) twelve thousand, two hundred and four  
(f) forty thousand and ninety-two  
(g) seventy-nine thousand, six hundred and twenty-six

Question 7: Write these numbers in words

- (a) 500,000      (b) 3,000,000      (c) 1,251,000  
(d) 18,000,905      (e) 9,208,071      (f) 2,133,394  
(g) 40,299,323      (h) 652,394,006

Question 8: Write these numbers in Figures

- (a) seven hundred and fifteen thousand  
(b) three hundred thousand, five hundred and twenty-nine  
(c) nine hundred and thirteen thousand, one hundred and eighty-two  
(d) seven million, five hundred and two thousand, seven hundred and nineteen  
(e) fifty million and twelve

Question 1: At a Yeovil Town football match, there are 4,137 spectators.



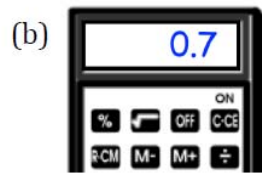
Write 4,137 in words.

Question 2: The diameter of Mars is **six thousand, seven hundred and seventy-nine** kilometres.



Write six thousand, seven hundred and seventy-nine in Figures.

Question 3: Write the values shown on each calculator in words.



Question 4: Maxine has attempted her homework.

Write these numbers in words

(a) 5400

(b) 2915

*five thousand and four hundred*

*two thousand nine hundred and fifteen*

(c) 79,032

(d) 100,408

*seventy-nine thousand, thirty-two*

*one million, four hundred and eight*

Explain the mistakes she has made.

Question 5: Write down the answer to  $125 \times 100$  in words

Question 6: Write down the answer to  $9 \div 100$  in word

## WORDS TO FIGURES 2

- (a) Write the number 3804 in words.  
(b) Write the number **ten thousand, two hundred and fifty one** in figures.
- Write 9482 in words.
- Write 1257 in words.
- At a Bath Rugby match, there were 13,912 spectators.  
Write 13,912 in words.
- Write the number **eighteen thousand, five hundred and one** in figures.
- 



The circumference of the Earth is  
**Forty thousand and seventy five** kilometres.  
Write **forty thousand and Seventy five** in figures.

- (a) Write the number 9112 in words.  
(b) Write the number **two million** in figures.
- (a) Write **twenty thousand** in figures.  
(b) Write **ten million** in figures.  
(c) Write **three tenths** in figures.  
(d) Write **seven thousand, two hundred and nineteen** in figures.  
(e) Write **one billion** in figures.
- (a) Write 18,500 in words.  
(b) Write 160,000 in words.  
(c) Write 0.04 in words.  
(d) Write 20,100,000 in words.  
(e) Write 312,905 in words.

Place Value  
Video 222 on [www.corbettmaths.com](http://www.corbettmaths.com)

Examples



Workout

Click here

Scan here

Question 1: Write down the value of underlined digit in each of the numbers below

- (a) 548                      (b) 902                      (c) 623                      (d) 3841
- (e) 87902                      (f) 48213                      (g) 39154                      (h) 24103
- (i) 294875                      (j) 940000                      (k) 2500000                      (l) 497000000
- (m) 0.53                      (n) 0.27                      (o) 1.395                      (p) 29.4827

Question 2: From each list of numbers, write down the largest number.

- (a) 58, 39, 44, 62                      (b) 294, 208, 198, 277                      (c) 91, 103, 100, 99
- (d) 807, 711, 1021, 888                      (e) 5454, 5000, 899, 5118                      (f) 30.3, 103, 9.98, 181

Question 3: Write these numbers in words

- (a) 5610                      (b) 29052                      (c) 312000
- (d) 1800000                      (e) 5138000                      (f) 6243821

Question 4: Write these numbers in figures

- (a) four hundred and sixty-eight
- (b) five thousand and twenty
- (c) twelve thousand, nine hundred and two
- (d) three hundred and thirty-one thousand, six hundred and seven
- (e) six million
- (f) nineteen million, two thousand and seven

Question 5: Arrange in order from smallest to largest

(a) 7, 5, 9, 12, 2

(b) 13, 20, 9, 12, 14, 6

(c) 70, 80, 20, 30, 90, 10

(d) 73, 28, 45, 38, 90, 21

(e) 130, 190, 210, 70, 300

(f) 605, 66, 566, 655, 506, 65, 555

(g) 2000, 385, 8100, 2800, 888, 400

Question 6: Place the correct sign, < or >, between the following pairs of numbers

(a) 3  1

(b) 2  7

(c) 8  5

(d) 28  21

(e) 110  113

(f) 102  99

(g) -3  2

(h) 4  -1

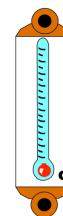
(i) -12  -9

### Apply

Question 1: Milton is 95 miles from Leek.  
Doncastle is 102 miles from Leek.  
Which town is the greater distance from Leek?

Question 2: Hannah took 817 seconds to complete a puzzle.  
Olly took 798 seconds to complete the same puzzle.  
Who completed the puzzle in the shortest time?

Question 3: Arrange these temperatures in order, from lowest to highest  
18°C, 22°C, 9.5°C, 15°C, 21°C, 17°C, 2°C



Question 4: Write down the value of the 7 in the answer to  $573 \times 100$

Question 5: Using the three digits 1, 2 and 3, write down all the different three digit numbers.

Question 6: Write down a number that is larger than 3.4 but smaller than 3.5

## Place Value

Video 222 on [www.corbettmaths.com](http://www.corbettmaths.com)

Question 7: Here are four digits

- (a) Use two of the digits to make the largest possible two-digit number.
- (b) Use all four digits to make the largest possible number.
- (c) Use all four digits to make the smallest possible **odd** number
- (d) Use all four digits to make the four-digit number closest to 4000.

Question 8: Here are four digits

- (a) Put one digit in each box to make the smallest possible total.

+

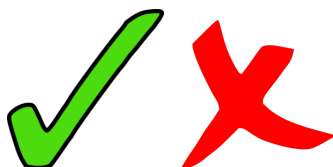
- (b) Write down the total

- (c) Put one digit in each box to make the largest possible total.

+

- (d) Write down the total

Answers



Click here



Scan here

Place value

1. Write down the value of the **6** in the number 13 629.
2. Write down the value of the **4** in the number 9048.
3. Write down the value of the **2** in the number 328 407.
4. Write down the value of the **9** in the number 79 813.
5.  $473 \times 10$   
Write down the value of the **7** in the answer.
6. There are 59,182 fans at a football match.  
Write down the value of the **5** in the number 59,182.
7. Here are four digits.  
9 4 7 5
  - (a) Use two of these digits to make the largest possible two-digit number.
  - (b) Use all four of these digits to make the four-digit number closest to 5000.
8. Write down the value of the **3** in the number 1.358
9. Write down the value of the **2** in the number 2 983 154
10. Here are four different digits.  
8 1 9 6
  - (a) (i) Put one digit in each box to make the **smallest** total.  
You may only use each digit once.  
(ii) Write down the total
  - (b) (i) Put one digit in each box to make the **largest** total.  
You may only use each digit once.  
(ii) Write down the total



Name: \_\_\_\_\_

## Exam Style Questions

### Place Value: Operations



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

### Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

Video 222a



1. Using the information that

$$47 \times 23 = 1081$$

write down the value of

(a)  $47 \times 230$

.....  
(1)

(b)  $4.7 \times 23$

.....  
(1)

(c)  $470 \times 230$

.....  
(1)

---

2. Using the information that

$$19 \times 345 = 6555$$

write down the value of

(a)  $190 \times 345$

.....  
(1)

(b)  $19 \times 3.45$

.....  
(1)

3. Using the information that

$$42 \times 31 = 1302$$

write down the value of

(a)  $42 \times 62$

.....  
**(1)**

(b)  $42 \times 32$

.....  
**(1)**

(c)  $42 \times 30$

.....  
**(1)**

---

4. Using the information that

$$3.9 \times 62 = 241.8$$

write down the value of

(a)  $3.9 \times 620$

.....  
**(1)**

(b)  $39 \times 0.62$

.....  
**(1)**

5. Using the information that

$$72 \times 4.3 = 309.6$$

write down the value of

(a)  $0.72 \times 4.3$

.....  
**(1)**

(b)  $309.6 \div 72$

.....  
**(1)**

(c)  $3096 \div 4.3$

.....  
**(1)**

---

6. Using the information that

$$1.7 \times 563 = 957.1$$

write down the value of

(a)  $1.7 \times 5.63$

.....  
**(1)**

(b)  $957.1 \div 17$

.....  
**(1)**

7. Using the information that

$$84 \times 264 = 22176$$

write down the value of

(a)  $8.4 \times 26.4$

.....  
**(1)**

(b)  $0.84 \times 0.264$

.....  
**(1)**

(c)  $22.176 \div 8.4$

.....  
**(1)**

---

8. Using the information that

$$123 \times 97 = 11931$$

write down the value of

(a)  $11931 \div 9.7$

.....  
**(1)**

(b)  $11931 \div 0.123$

.....  
**(1)**

9. Using the information that

$$3.8 \times 48 = 182.4$$

write down the value of

(a)  $38 \times 48$

.....  
(1)

(b)  $3800 \times 4.8$

.....  
(1)

(c)  $182.4 \div 38$

.....  
(1)

(d)  $1.824 \div 0.48$

.....  
(1)

(e)  $3.8 \times 49$

.....  
(1)

(f)  $7.6 \times 48$

.....  
(1)

10. Using the information that

$$87 \times 456 = 39672$$

write down the value of

(a)  $0.87 \times 456000$

.....  
(1)

(b)  $870 \times 4.56$

.....  
(1)

(c)  $39.672 \div 4.56$

.....  
(1)

(d)  $3967.2 \div 8.7$

.....  
(1)

(e)  $3967200 \div 87000$

.....  
(1)

(f)  $396.72 \div 0.0456$

.....  
(1)

## Ordering

Question 1: Arrange in order from smallest to largest

- (a) 8, 5, 9, 10, 2                      (b) 11, 20, 9, 15, 14, 3  
(c) 40, 60, 20, 30, 90, 10            (d) 83, 18, 45, 37, 90, 21  
(e) 140, 180, 210, 70, 300            (f) 605, 56, 566, 655, 506, 65, 555  
(g) 2000, 375, 7100, 2900, 999, 400

Question 2: Arrange these temperatures in order, from lowest to highest

- (a) 8°C, 12°C, 9°C, 15°C, 11°C, 7°C, 2°C  
(b) 2°C, -5°C, 4°C, 8°C, -3°C, 1°C, -7°C  
(c) 5°C, -3°C, 11°C, 9°C, -14°C, 21°C, -1°C

Question 3: Redville is 102 miles from Leek.  
Castleville is 75 miles from Leek.

Which town is the greater distance from Leek?  
Shown below are the heights of five hills.



Altmore	538m
Heathmount	551m
Slemish	499m
Donard	542m
Cley Hill	517m

List the hills in order of size, starting with the smallest.

Question 4: James took 617 seconds to complete a puzzle.

Georgia took 598 seconds to complete the same puzzle.

Who completed the puzzle in the shortest time?

Question 5: Jemima earns £41,838, Patrick earns £40,989 and Benny earns £42,001

- (a) Who earns the least amount of money?  
(b) Who earns the most amount of money?

Arrange these numbers in order of size, starting with the smallest.

- One billion  
Half a million  
Six hundred and ten thousand  
Ninety seven thousand  
Two million



Extension:

Arrange in order from smallest to largest

(a) 3, -5, 1, 0, -2, 4 (b) -1, 8, -5, 2, -9, -4, 3

(c) -1, -7, -2, 5, -6, 1 (d) 10, -7, -3, 5, -9, -2, -12

(e) 21, -3, 16, -19, -15, 23, -30 (f) -25, 35, 15, -5, 25, -45, 20

(g) 129, 101, -11, -111, 92, -91, 133, -29

Question 1: Arrange in order from smallest to largest

- (a) 3.7, 3.5, 3.9, 3.4, 3.8                      (b) 9.2, 2.9, 5.4, 1.8, 8.7  
(c) 4.6, 4.9, 14.1, 0.9, 1.2                    (d) 8.13, 8.05, 8.24, 8.09, 8.15, 8.02  
(e) 1.53, 1.48, 1.59, 1.44, 2.11, 0.98      (f) 0.59, 1.24, 0.45, 1.34, 0.88, 2.01

Question 2: Arrange in order from largest to smallest

- (a) 1.2, 1.08, 1.13, 1.6, 1.29                      (b) 5.25, 5.2, 5.19, 5.08, 5.1, 5.21  
(c) 40.6, 46.1, 40.49, 40.68, 46, 46.09        (d) 0.24, 0.3, 0.125, 0.2, 0.199, 0.18  
(e) 0.82, 0.082, 0.9, 0.807, 0.8                (f) 65, 6.5, 0.65, 7.65, 0.076, 7  
(g) 0.25, 0.3, 0.2, 0.06, 0.19                    (h) 7.81, 7.49, 7.9, 7.007, 7.1, 7.107  
(i) 10.083, 10.08, 10.009, 10.56, 10.3        (j) 0.342, 0.075, 0.256, 0.34, 0.6, 0.4

Question 3: Arrange these amounts of money in order, from highest to lowest.

- (a) £6.74, £10, £1.99, £8, £3.30, £2



- (b) 80p, £1, £0.09, 23p, £2.75, £0.82, £20

Question 4: The distance of various landmarks from Big Ben are listed below. Arrange the landmarks in order, from closest to furthest.

London Eye	0.41 miles
Wembley	11.62 miles
Buckingham Palace	0.8 miles
Trafalgar Square	0.63 miles
Hyde Park	2.27 miles
Thorpe Park	24.7 miles



Question 5: Arrange these measurements in order from largest to smallest

- (a) 6.2m, 6.077m, 6.31m, 6.19m, 6.4m, 6.009m  
(b) 5kg, 800g, 1.2kg, 90g, 0.6kg

Question 6: The heights of seven footballers are listed below.

1.9m, 1.82m, 1.78m, 1.8m, 1.88m, 1.86m, 1.7m

Arrange the heights in order from smallest to largest.

Question 7: The lengths of time that it takes to complete a jigsaw are below.

0.5 hours, 1.25 hours, 100 minutes, 0.75 hours, 40 minutes,  
2 hours, 1.5 hours, 180 minutes, 61 minutes, 0.25 hours.

Arrange the times in order, from quickest to slowest.

Question 8 Five boys take part in a long jump competition.

The distances jumped were:

4.31m   4.08m   4.1m   4.093m   4.51m

- (a) Write down the distance of the longest jump
- (b) Put the jumps in order, starting with the shortest.

### Extension

Arrange these temperatures in order, from lowest to highest

(a) 11 °C, 10.8°C, 12.3 °C, 15 °C, 12.7 °C

(b) 8.5 °C, 0.7 °C, -3 °C, 0.9 °C, 6 °C, 1.3 °C, -5.1°C

The heights of 7 children are shown below.

132cm   1.2m   98cm   0.99m   116cm   1.4m   1.33m

- (a) Change 132cm into metres.
- (b) Change 98cm into metres.
- (c) Order the heights, starting with the shortest.

## Addition

Video 6 on [www.corbettmaths.com](http://www.corbettmaths.com)

Examples



Workout

Click here

Scan here

Question 1: Work out the answers to the following additions

- (a)  $51 + 37$       (b)  $27 + 21$       (c)  $37 + 44$       (d)  $84 + 19$   
(e)  $48 + 48$       (f)  $39 + 21 + 43$       (g)  $75 + 56$       (h)  $93 + 84$

Question 2: Work out these additions

- (a)  $123 + 564$       (b)  $557 + 61$       (c)  $839 + 152$       (d)  $357 + 368$   
(e)  $940 + 346$       (f)  $382 + 121 + 85$       (g)  $948 + 253$       (h)  $777 + 444$

Question 3: Complete these additions

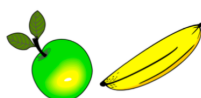
- (a)  $4854 + 1162$       (b)  $4611 + 3270$       (c)  $5792 + 4437$       (d)  $4780 + 1590$   
(e)  $939 + 1103$       (f)  $2385 + 5584$       (g)  $8888 + 4424$       (h)  $5118 + 3054 + 1112$

Question 4: Work out

- (a)  $48832 + 14503$       (b)  $39104 + 22934$       (c)  $8383 + 11385 + 7673 + 711$

Apply

Question 1: Daniel buys an apple for 39p and a banana for 27p. How much does he pay in total?

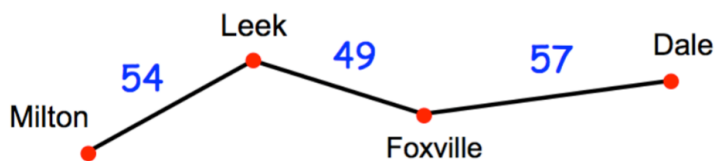


Question 2: James has 86 marbles and Hannah has 95 marbles. How many marbles do they have altogether?

## Addition

Video 6 on [www.corbettmaths.com](http://www.corbettmaths.com)

Question 3: The distances, in kilometres, between four towns are shown on the map.



- (a) Work out the distance between Leek and Dale.  
 (b) Work out the distance between Milton and Dale

Question 4: In year 7 there are 238 students.  
 In year 8 there are 225 students.  
 In year 9 there are 233 students.

How many students are there in total in years 7, 8 and 9?

Question 5: Copy these additions into your book and fill in the missing numbers.

(a)

$$\begin{array}{r} 54 \\ + 3\ \square \\ \hline \square 9 \end{array}$$

(b)

$$\begin{array}{r} 4\ \square \\ + \square 4 \\ \hline 72 \end{array}$$

(c)

$$\begin{array}{r} 5\ \square\ \square \\ + \square 7 1 \\ \hline 9 3 4 \end{array}$$

Question 6: Can you spot any mistakes in the questions below?

$$\begin{array}{r} 859 \\ + 176 \\ \hline 1025 \end{array}$$

$$\begin{array}{r} 282 \\ 399 \\ + 675 \\ \hline 1256 \end{array}$$

Answers



- Calculate  $32 + 165$
- Work out  $78 + 54$
- Find the sum of 523 and 182.
- 

43	14	40	56	33
19	46	28	20	17

What is the biggest number you can get by **adding** any two numbers from the grid?

- Shown is a menu from a café.

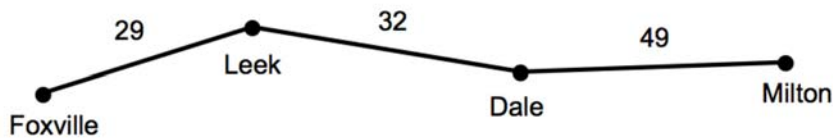
Menu

Tea	£1.35
Coffee	£1.80
Scone	£1.30
Biscuit	70p

Henry buys a tea, a scone and a biscuit.  
Work out the total cost.

- Work out  $416 + 49 + 274$

- The distances, in miles, between four towns are shown on the map.



- Work out the distance between Leek and Milton.
- Work out the distance between Foxville and Milton.

- Fill in the missing digits to make the addition correct.

$$\begin{array}{r}
 \square \ 6 \ 4 \\
 + \ 2 \ \square \ 6 \\
 \hline
 7 \ 5 \ \square \\
 \hline
 \end{array}$$

9.

**Chair £65**

**Sofa £149**

**Table £210**

Bernard buys a table, a sofa and two chairs.

Work out the total cost of the items he buys.

### Workout

Question 1: Work out the answers to the following subtractions

- (a)  $68 - 32$       (b)  $98 - 21$       (c)  $51 - 24$       (d)  $70 - 38$   
(e)  $46 - 28$       (f)  $81 - 43$       (g)  $94 - 67$       (h)  $85 - 56$

Question 2: Work out these subtractions

- (a)  $785 - 512$       (b)  $548 - 26$       (c)  $839 - 152$       (d)  $557 - 319$   
(e)  $940 - 236$       (f)  $888 - 192$       (g)  $603 - 381$       (h)  $800 - 118$

Question 3: Complete these subtractions

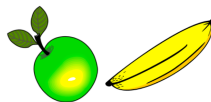
- (a)  $4854 - 1132$       (b)  $4811 - 1570$       (c)  $5792 - 4437$       (d)  $4781 - 1952$   
(e)  $7925 - 1176$       (f)  $8080 - 3131$       (g)  $8132 - 7569$       (h)  $9000 - 3941$

Question 4: Work out

- (a)  $48832 - 14503$       (b)  $39104 - 22934$       (c)  $78383 - 11385$

### Apply

Question 1: Sarah buys an apple for 41p and a banana for 27p. How much more expensive is an apple than a banana



Question 2: Kelly has 76 marbles and Hannah has 102 marbles. How many more marbles does Hannah have than Kelly?



## Subtraction

Video 304 on Corbettmaths

Question 3: At a football match there are 2942 Rovers fans and 9381 City fans.  
How many more fans did City have?

Question 4: Theo wants to buy a laptop that costs £425. Theo has saved £267 so far.  
How much more money does Theo need to save?

Question 5: Copy these subtractions into your book and fill in the missing numbers.

(a)

$$\begin{array}{r} 87 \\ - 5\ \square \\ \hline \square 3 \end{array}$$

(b)

$$\begin{array}{r} 547 \\ - 1\ \square\square \\ \hline \square 69 \end{array}$$

(c)

$$\begin{array}{r} \square 5 \square \\ - 126 \\ \hline 6 \square 5 \end{array}$$

Question 6: Can you spot any mistakes in the questions below?

$$\begin{array}{r} 698 \\ - 149 \\ \hline 551 \end{array}$$

$$\begin{array}{r} \overset{5}{\cancel{6}} 0 \overset{1}{\cancel{0}} \\ - 107 \\ \hline 403 \end{array}$$

1. Calculate  $327 - 145$
2. Work out  $481 - 346$
3. Find the difference between 903 and 245.
4. Work out  $9348 - 1542$
- 5.

64	41	34	19	78
25	18	24	70	56

From the numbers in the grid, write down

- (a) two numbers with a difference of 60.
- (b) two numbers with a difference of 53.

6. A chocolate bar costs 68p.  
Rosie buys 2 of these chocolate bars.  
How much change should she receive from £5?

7. Below is part of a customer's electricity bill.

Previous reading    29381  
Present reading    30122

"Work out how many units of electricity were used.

8. Work out  $800 - 382$

9.

Format	Weight	1st Class	2nd Class
Letters	0 - 100g	62p	53p
Large Letters	0 - 100g	93p	73p
	101 - 250g	£1.24	£1.17
	251 - 500g	£1.65	£1.48

The table shows the prices of first and second class stamps for Letters and Large Letters up to 500g.

Matt is going to post a Letter weighing 80g and a Large Letter weighing 300g.  
He chooses to post them both as second class.

How much money has Matt saved by posting second class instead of first class?

10. Find the missing numbers below.

(a)

$$403 + \boxed{\phantom{000}} = 511$$

(b)

$$391 - \boxed{\phantom{000}} = 125$$

11." Find the missing numbers below.

(a)

$$\begin{array}{r} \boxed{\phantom{0}} 2 4 \\ - 1 5 \boxed{\phantom{0}} \\ \hline 6 \boxed{\phantom{0}} 9 \end{array}$$

(b)

$$\begin{array}{r} \boxed{\phantom{0}} 0 \boxed{\phantom{0}} \\ - 3 8 1 \\ \hline 5 \boxed{\phantom{0}} 1 \end{array}$$

## Workout

Question 1: Work out each of the following multiplications

- |                      |                       |                      |                       |
|----------------------|-----------------------|----------------------|-----------------------|
| (a) $3 \times 10$    | (b) $8 \times 10$     | (c) $12 \times 10$   | (d) $16 \times 10$    |
| (e) $25 \times 10$   | (f) $42 \times 10$    | (g) $78 \times 10$   | (h) $20 \times 10$    |
| (i) $90 \times 10$   | (j) $112 \times 10$   | (k) $203 \times 10$  | (l) $140 \times 10$   |
| (m) $529 \times 10$  | (n) $400 \times 10$   | (o) $1925 \times 10$ | (p) $3500 \times 10$  |
| (q) $2710 \times 10$ | (r) $50000 \times 10$ | (s) $6204 \times 10$ | (t) $99099 \times 10$ |

Question 2: Work out each of the following multiplications

- |                        |                         |                        |                        |
|------------------------|-------------------------|------------------------|------------------------|
| (a) $0.2 \times 10$    | (b) $0.8 \times 10$     | (c) $0.1 \times 10$    | (d) $1.3 \times 10$    |
| (e) $5.8 \times 10$    | (f) $15.1 \times 10$    | (g) $20.5 \times 10$   | (h) $357.4 \times 10$  |
| (i) $0.06 \times 10$   | (j) $0.14 \times 10$    | (k) $0.42 \times 10$   | (l) $3.07 \times 10$   |
| (m) $0.009 \times 10$  | (n) $0.0053 \times 10$  | (o) $0.105 \times 10$  | (p) $0.0381 \times 10$ |
| (q) $3.4905 \times 10$ | (r) $0.25801 \times 10$ | (s) $400.05 \times 10$ | (t) $122.08 \times 10$ |

Question 3: Work out each of the following multiplications

- |                       |                       |                       |                        |
|-----------------------|-----------------------|-----------------------|------------------------|
| (a) $4 \times 100$    | (b) $7 \times 100$    | (c) $15 \times 100$   | (d) $28 \times 100$    |
| (e) $30 \times 100$   | (f) $90 \times 100$   | (g) $165 \times 100$  | (h) $593 \times 100$   |
| (i) $520 \times 100$  | (j) $203 \times 100$  | (k) $400 \times 100$  | (l) $100 \times 100$   |
| (m) $2000 \times 100$ | (n) $3902 \times 100$ | (o) $2030 \times 100$ | (p) $40001 \times 100$ |

Question 4: Work out each of the following multiplications

- |                        |                         |                          |                        |
|------------------------|-------------------------|--------------------------|------------------------|
| (a) $0.3 \times 100$   | (b) $0.9 \times 100$    | (c) $0.02 \times 100$    | (d) $0.05 \times 100$  |
| (e) $0.15 \times 100$  | (f) $0.23 \times 100$   | (g) $5.8 \times 100$     | (h) $4.13 \times 100$  |
| (i) $3.08 \times 100$  | (j) $0.822 \times 100$  | (k) $0.606 \times 100$   | (l) $0.004 \times 100$ |
| (m) $320.4 \times 100$ | (n) $2.3802 \times 100$ | (o) $0.00351 \times 100$ | (p) $105.1 \times 100$ |

## Multiplication by 10, 100, 1000

Video 202 on [www.corbettmaths.com](http://www.corbettmaths.com)

Question 5: Work out each of the following multiplications

- (a)  $5 \times 1000$       (b)  $9 \times 1000$       (c)  $18 \times 1000$       (d)  $45 \times 1000$   
(e)  $40 \times 1000$       (f)  $70 \times 1000$       (g)  $200 \times 1000$       (h)  $595 \times 1000$   
(i)  $710 \times 1000$       (j)  $909 \times 1000$       (k)  $900 \times 1000$       (l)  $1000 \times 1000$   
(m)  $8000 \times 1000$       (n)  $5800 \times 1000$       (o)  $5040 \times 1000$       (p)  $60000 \times 1000$

Question 6: Work out each of the following multiplications

- (a)  $0.2 \times 1000$       (b)  $0.8 \times 1000$       (c)  $1.4 \times 1000$       (d)  $8.3 \times 1000$   
(e)  $0.06 \times 1000$       (f)  $0.007 \times 1000$       (g)  $17.5 \times 1000$       (h)  $30.9 \times 1000$   
(i)  $4.45 \times 1000$       (j)  $0.48 \times 1000$       (k)  $0.033 \times 1000$       (l)  $0.0081 \times 1000$   
(m)  $0.403 \times 1000$       (n)  $0.2002 \times 1000$       (o)  $1.0934 \times 1000$       (p)  $93.0491 \times 1000$

Question 7: Work out each of the following multiplications

- (a)  $76 \times 10$       (b)  $230 \times 100$       (c)  $3 \times 1000$       (d)  $52 \times 1000$   
(e)  $6 \times 100$       (f)  $352 \times 10$       (g)  $4.5 \times 100$       (h)  $0.9 \times 10$   
(i)  $25 \times 100$       (j)  $8001 \times 1000$       (k)  $4.1 \times 1000$       (l)  $0.75 \times 10$   
(m)  $3.5 \times 100$       (n)  $50.89 \times 100$       (o)  $0.018 \times 100$       (p)  $0.679 \times 1000$   
(q)  $0.888 \times 10$       (r)  $3094.5 \times 100$       (s)  $255.21 \times 10$       (t)  $39.001 \times 1000$   
(u)  $3.005 \times 10$       (v)  $0.005 \times 100$       (w)  $8900 \times 100$       (x)  $0.011 \times 1000$   
(y)  $94.6 \times 100$       (z)  $4.99 \times 1000$

Apply

Question 1: Natalie saves £100 a month towards a new car.  
How much money will she have saved after 11 months?



## Multiplication by 10, 100, 1000

Video 202 on [www.corbettmaths.com](http://www.corbettmaths.com)

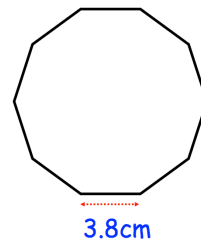
Question 2: A box contains 10 eggs.  
Hilary needs 68 eggs.  
How many boxes of eggs should she buy?

Question 3: A ticket for a charity concert costs £10.  
231 tickets are sold.  
How much money is raised for charity?

Question 4: A box of drawing pins contains 100 pins.  
How many drawing pins are there in 40 boxes?

Question 5: (a) How many years are there in 15 centuries?  
(b) How many years are there in 8 decades?  
(c) How many years are there in 4 millennia?

Question 6: The decagon below is regular, which means that all sides are the same length.  
Work out the perimeter of the decagon.



Question 7: Shown below are some questions and answers.  
Match each question and correct answer.  
The first one has been completed for you.

$0.032 \times 10$	32
$3.2 \times 10$	0.32
$0.32 \times 10$	3.2
$0.32 \times 1000$	3200
$32 \times 100$	320

A line connects  $0.032 \times 10$  to 0.32.

Question 8: Write down the value of the 2 in the answer to  $7.025 \times 1000$

Question 9: A coffee shop sells cups of coffee in 0.3 litre cups.  
In one week they sell 10000 cups of coffee.  
How many litres of coffee do they sell in one week?

Workout

Question 1: Work out each of the following divisions

- |                    |                   |                    |                    |
|--------------------|-------------------|--------------------|--------------------|
| (a) $30 \div 10$   | (b) $90 \div 10$  | (c) $120 \div 10$  | (d) $250 \div 10$  |
| (e) $800 \div 10$  | (f) $380 \div 10$ | (g) $4000 \div 10$ | (h) $1600 \div 10$ |
| (i) $9 \div 10$    | (j) $2 \div 10$   | (k) $1 \div 10$    | (l) $7 \div 10$    |
| (m) $72 \div 10$   | (n) $15 \div 10$  | (o) $93 \div 10$   | (p) $219 \div 10$  |
| (q) $3414 \div 10$ | (r) $109 \div 10$ | (s) $2015 \div 10$ | (t) $870 \div 10$  |
| (u) $0.6 \div 10$  | (v) $0.3 \div 10$ | (w) $0.15 \div 10$ | (x) $0.08 \div 10$ |

Question 2: Work out each of the following divisions

- |                      |                      |                     |                     |
|----------------------|----------------------|---------------------|---------------------|
| (a) $200 \div 100$   | (b) $500 \div 100$   | (c) $900 \div 100$  | (d) $1400 \div 100$ |
| (e) $4800 \div 100$  | (f) $6200 \div 100$  | (g) $3000 \div 100$ | (h) $1000 \div 100$ |
| (i) $17000 \div 100$ | (j) $53000 \div 100$ | (k) $2810 \div 100$ | (l) $9145 \div 100$ |
| (m) $180 \div 100$   | (n) $375 \div 100$   | (o) $520 \div 100$  | (p) $70 \div 100$   |
| (q) $40 \div 100$    | (r) $17 \div 100$    | (s) $5 \div 100$    | (t) $2 \div 100$    |
| (u) $2.9 \div 100$   | (v) $0.8 \div 100$   | (w) $0.35 \div 100$ | (x) $4.2 \div 100$  |

Question 3: Work out each of the following divisions

- |                          |                        |                       |                       |
|--------------------------|------------------------|-----------------------|-----------------------|
| (a) $4000 \div 1000$     | (b) $7000 \div 1000$   | (c) $16000 \div 1000$ | (d) $86000 \div 1000$ |
| (e) $50000 \div 1000$    | (f) $370000 \div 1000$ | (g) $1900 \div 1000$  | (h) $4250 \div 1000$  |
| (i) $5833 \div 1000$     | (j) $900 \div 1000$    | (k) $820 \div 1000$   | (l) $41 \div 1000$    |
| (m) $2 \div 1000$        | (n) $13 \div 1000$     | (o) $9 \div 1000$     | (p) $0.3 \div 1000$   |
| (q) $1.55 \div 1000$     | (r) $0.51 \div 1000$   | (s) $0.02 \div 1000$  | (t) $3.08 \div 1000$  |
| (u) $67000000 \div 1000$ | (v) $0.045 \div 1000$  |                       |                       |

Question 4: Work out each of the following divisions

- (a)  $56 \div 10$       (b)  $48000 \div 100$       (c)  $3 \div 1000$       (d)  $52 \div 1000$   
 (e)  $6 \div 100$       (f)  $312 \div 10$       (g)  $4.5 \div 100$       (h)  $0.9 \div 10$   
 (i)  $25 \div 100$       (j)  $8001 \div 1000$       (k)  $4.1 \div 1000$       (l)  $0.75 \div 10$   
 (m)  $3.5 \div 100$       (n)  $50.89 \div 100$       (o)  $0.018 \div 100$       (p)  $0.679 \div 1000$   
 (q)  $0.888 \div 10$       (r)  $3094.5 \div 100$       (s)  $255.21 \div 10$       (t)  $39.001 \div 1000$

Apply

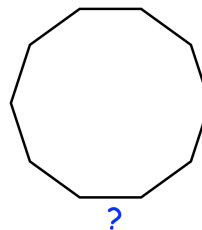
Question 1: Vicky saves £10 each week.  
She wants to buy a violin that costs £180  
How many weeks will it take Vicky to save enough money?

Question 2: Barry prints booklets that each have 100 pages.  
In total, he prints 6000 pages.  
How many booklets did Barry print?

Question 3: A box of staples contains 1000 staples.  
A secretary wants to order 3000000 staples.  
How many boxes of staples should they order?

Question 4: A decagon has 10 sides.  
The decagon below is regular, which means that all sides are the same length.  
Work out the length of each side of the decagon.

Perimeter = 48cm



Question 5: A bakery makes 2600 cupcakes in a week.  
The cupcakes are placed into boxes of 10.  
Each box of cupcakes is sold for £3.  
How much money does the bakery make for selling the cupcakes?

Question 6: Work out the missing numbers

(a)   $\times 10 = 0.009$

(b)   $\times 100 = 0.53$



1. Work out

(a)  $70 \div 10$

(b)  $6000 \div 100$

(c)  $17 \div 10$

(d)  $93 \div 100$

(e)  $28900 \div 1000$

(f)  $0.84 \div 10$

2. An egg box can hold 10 eggs.

How many eggs are there in 45 full boxes?

3. Jacob is paid £10 an hour.

His monthly pay for October was £890

How many hours did hours did Jacob work in October?

4. Shown below are some Questions and answers.

$200 \div 10$        $0.2$

$0.2 \div 10$        $20$

$0.2 \times 10$        $2$

$2 \div 10$        $0.02$

$2 \div 1000$        $0.002$

Match the correct questions and answers, copy them into your jotter.  
The first one has been completed for you.

5. Copy into your jotter and fill in the missing numbers

(a)

$85 \times \square = 8500$

(b)

$\square \times 1000 = 400$

(c)

$\square \times 10 = 457.1$

(d)

$1900 \div \square = 19$

(e)

$\square \div 10 = 0.05$

(f)

$94000 \div \square = 94$

6. (a) Work out  $942 \times 10$   
(b) Write down the value of the digit 4 in the answer to (a)
7. Write down the value of the digit 3 in the answer  $931 \times 100$
8. Write down the value of the digit 5 in the answer  $125000 \div 100$
9. Work out twenty thousand divided by one million
10. A coffee shop sells cups of coffee in 0.4 litre cups.  
In one day they sell 10000 cups of coffee.  
How many litres of coffee do they sell?
11. Carly needs 42000 blocks of Lego to build a large castle.  
The Lego blocks are sold in boxes of 100.  
How many boxes of Lego does she need?

### Extension

#### Work out

(a)  $4000 \div 10^2$

(b)  $25000 \div 10^3$

(c)  $170 \div 10^2$

(d)  $9300 \div 10^4$

(e)  $98 \div 10^2$

(f)  $54 \div 10^3$

1. Calculate

(a)  $171 \div 3$  (b)  $875 \div 5$

2. Work out (a)  $882 \div 6$  (b)  $783 \div 9$

3. Calculate

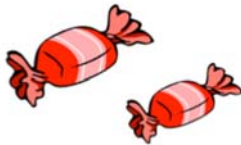
(a)  $3276 \div 7$  (b)  $9704 \div 8$

4.



Gianluca, James and Henry are organising a charity cake sale. They want to make 54 cupcakes in total. How many cupcakes should each boy make?

5.



A teacher has 153 sweets. The teacher shares the sweets equally among 9 students. How many sweets does each pupil receive?

6.



5 friends go on a coach trip. The total cost of the trip is £84. Work out the cost for each person.

7. Calculate

(a)  $228 \div 12$  (b)  $915 \div 15$

8. Calculate

(a)  $680 \div 20$  (b)  $520 \div 40$

9.



Mr Green buys a bicycle that costs £400.  
He pays a £50 deposit and pays the rest in 7 monthly payments.  
Work out the cost of each monthly payment.

10. Poppy has £7.04 credit on her mobile phone.  
It costs 8p to send a text message.  
How many text messages can Poppy send?

11. Find the remainder , when 817 is divided by 9.

12. How many boxes of chocolates costing £3.20 could you buy from £20?

13. Paul has £10 to buy rulers at 60p each.

What change should he get if he buys as many as possible?

14. Calculate  $840 \div 35$

15. Mrs Dixon puts 230 eggs into boxes.

Each box holds 12 eggs.

How many egg boxes does Mrs Dixon need to put all the eggs into boxes?

16. 220 fans travel to a rugby match in minibuses.

Each minibus holds 18 fans.

How many minibuses are needed?

17. Work out, writing your answers as a decimal number.

(a)  $58 \div 5$       (b)  $188 \div 8$       (c)  $495 \div 12$

Workout

Question 1: Work out the remainder for each of the following divisions.

- |                  |                  |                  |                   |                  |
|------------------|------------------|------------------|-------------------|------------------|
| (a) $17 \div 2$  | (b) $23 \div 5$  | (c) $14 \div 3$  | (d) $19 \div 4$   | (e) $14 \div 2$  |
| (f) $26 \div 6$  | (g) $45 \div 10$ | (h) $31 \div 7$  | (i) $12 \div 9$   | (j) $30 \div 8$  |
| (k) $40 \div 11$ | (l) $52 \div 8$  | (m) $49 \div 5$  | (n) $66 \div 9$   | (o) $80 \div 7$  |
| (p) $102 \div 5$ | (q) $79 \div 3$  | (r) $139 \div 4$ | (s) $283 \div 10$ | (t) $90 \div 12$ |

Question 2: Work out the remainder for each of the following divisions.

- |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| (a) $326 \div 7$  | (b) $776 \div 3$  | (c) $359 \div 6$  | (d) $232 \div 8$  |
| (e) $400 \div 12$ | (f) $452 \div 15$ | (g) $377 \div 16$ | (h) $283 \div 11$ |

Question 3: Work out the following divisions.  
Give each answer as a decimal number.  
e.g.  $13 \div 2 = 6.5$

- |                   |                    |                    |                   |                  |
|-------------------|--------------------|--------------------|-------------------|------------------|
| (a) $7 \div 2$    | (b) $9 \div 5$     | (c) $43 \div 2$    | (d) $27 \div 5$   | (e) $86 \div 5$  |
| (f) $56 \div 10$  | (g) $14 \div 4$    | (h) $66 \div 4$    | (i) $51 \div 6$   | (j) $41 \div 4$  |
| (k) $75 \div 4$   | (l) $26 \div 8$    | (m) $38 \div 8$    | (n) $40 \div 3$   | (o) $29 \div 3$  |
| (p) $123 \div 15$ | (q) $111 \div 12$  | (r) $300 \div 9$   | (s) $748 \div 20$ | (t) $253 \div 6$ |
| (u) $853 \div 40$ | (v) $1879 \div 20$ | (w) $8161 \div 80$ |                   |                  |

Question 4: Work out the following divisions.  
Give each answer as a mixed number and simplify any fraction.  
e.g.  $14 \div 3 = 4\frac{2}{3}$

- |                   |                   |                   |                   |                 |
|-------------------|-------------------|-------------------|-------------------|-----------------|
| (a) $11 \div 2$   | (b) $38 \div 3$   | (c) $11 \div 6$   | (d) $43 \div 10$  | (e) $21 \div 5$ |
| (f) $54 \div 10$  | (g) $50 \div 8$   | (h) $45 \div 7$   | (i) $78 \div 5$   | (j) $99 \div 4$ |
| (k) $155 \div 6$  | (l) $290 \div 11$ | (m) $481 \div 12$ | (n) $324 \div 5$  | (o) $83 \div 9$ |
| (p) $384 \div 15$ | (q) $772 \div 10$ | (r) $358 \div 20$ | (s) $475 \div 40$ |                 |

Apply

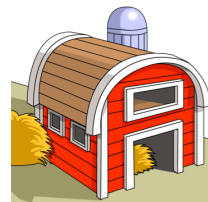
Question 1: Simon is sharing 27 marbles equally between 4 friends.  
How many marbles are left over?



Question 2: Rebecca is selling raffle tickets in booklets of 5.  
She has 86 raffle tickets.

- (a) How many booklets can Rebecca sell?
- (b) How many tickets will be left over?

Question 3: Eggs are being packed into boxes of 6.  
Farmer Richards has 77 eggs.



- (a) How many boxes can he fill?
- (b) How many eggs will be left over?

Question 4: At a wedding there are 125 guests.  
8 people can sit at each table.  
All the tables are filled, except one.  
How many guests sit at the table that is not filled?

Question 5: Burt is making cupcakes.  
He places the cupcakes in boxes of 12.  
Burt has 200 cupcakes.  
How many boxes can he fill?



Question 6: Five friends share £13.  
How much do they receive each?

Question 7: The perimeter of a square is 171cm  
Find the length of each side.

Question 8: Michael is saving for a holiday.  
The holiday will cost him £885.  
He will save money for one year.  
Michael will save an equal amount each month to pay for the holiday.  
How much should he save each month?



Workout

Question 1: Find the midpoint of each pair of numbers

- (a) 5 and 9            (b) 10 and 20            (c) 2 and 8            (d) 40 and 60  
(e) 6 and 16            (f) 7 and 13            (g) 90 and 98            (h) 25 and 31  
(i) 19 and 41            (j) 30 and 44            (k) 101 and 199            (l) 64 and 92  
(m) 210 and 570            (n) 135 and 215            (o) 123 and 321            (p) 83 and 111

Question 2: Find the midpoint of each pair of numbers

- (a) 4 and 7            (b) 3 and 8            (c) 9 and 17            (d) 2 and 21  
(e) 15 and 20            (f) 70 and 85            (g) 11 and 20            (h) 44 and 51  
(i) 28 and 55            (j) 63 and 98            (k) 74 and 103            (l) 99 and 148  
(m) 193 and 414            (n) 230 and 287            (o) 121 and 504            (p) 1400 and 1555

Question 3: Find the midpoint of each pair

- (a) £3 and £4            (b) £4 and £7            (c) £12 and £15.20            (d) £40 and £65  
(e) £5 and 80p            (f) 35p and £1.21            (g) £1.96 and £4.02            (h) £933.24 and £62.78

Question 4: Find the midpoint of each pair of numbers

- (a) 8.1 and 8.7            (b) 2.6 and 3.4            (c) 1.8 and 7.4            (d) 4.5 and 9.2  
(e) 25.5 and 31            (f) 15.65 and 16.3            (g) 3.24 and 5.12            (h) 6.16 and 7.29

Question 5: Find the midpoint of each pair of numbers

- (a) -1 and 5            (b) -6 and 16            (c) -20 and 5            (d) -13 and -5  
(e) -25 and 75            (f) -34 and 8            (g) -10.5 and 15.5            (h) -270 and -128

Question 6: Find the midpoint of each pair of fractions

(a)  $\frac{1}{10}$  and  $\frac{7}{10}$

(b)  $\frac{3}{8}$  and  $\frac{5}{8}$

(c)  $\frac{1}{4}$  and  $\frac{1}{2}$

(d)  $\frac{1}{3}$  and  $\frac{7}{9}$

(e)  $\frac{2}{5}$  and  $\frac{3}{4}$

(f)  $\frac{1}{3}$  and  $\frac{4}{5}$

(g)  $\frac{7}{8}$  and  $3\frac{1}{8}$

(h)  $\frac{19}{20}$  and  $4\frac{1}{4}$

(i)  $1\frac{3}{4}$  and  $2\frac{2}{9}$

### Apply

Question 1: Gregor works out the midpoint of 14 and x.  
His answer is 19.  
Work out x.

Question 2: Meg works out the midpoint of 13 and y.  
Her answer is 19.5.  
Work out y.

Question 3: Harry has 60p and Claire has £1.70.  
How much money should Claire give Harry so that they have the same amount?

Question 4: Beth has £24 and Donal has £57.  
How much money should Donal give Beth so that they have the same amount?

Question 5: Roscoe has 78p and Jess has £3.24.  
How much money should Jess give Roscoe so that they have the same amount?

Question 6: Paul, Gina and Bill all have some money.  
Paul has £4.20  
Gina has more money than Paul and Bill.  
Gina gives Paul and Bill £1.70 each.  
Paul and Gina now have the same amount of money.  
Bill now has half the amount of money that Gina originally had.  
How much money do they have altogether?



Question 7: The mean of two numbers is 11.  
One of the numbers is 17.5  
Find the other number.

Question 8: Find the median of 9, 83, 14, 135, 18 and 310



1. Work out

- (a)  $8 \times 10$       (b)  $6 \times 100$       (c)  $17 \times 1000$   
(d)  $3.4 \times 10$       (e)  $0.2 \times 100$       (f)  $49.1 \times 1000$

2. Work out

- (a)  $70 \div 10$       (b)  $6000 \div 100$       (c)  $17 \div 10$   
(d)  $93 \div 100$       (e)  $28900 \div 100$       (f)  $0.84 \div 10$

3. An egg box can hold 10 eggs.

How many eggs are there in 45 full boxes?

4. Jacob is paid £10 an hour.

His monthly pay for October was £890

How many hours did hours did Jacob work in October?

5. Shown below are some questions and answers.

$200 \div 10$        $0.2$

$0.2 \div 10$        $20$

$0.2 \times 10$        $2$

$2 \div 10$        $0.02$

$2 \div 1000$        $0.002$

Copy out and match the correct questions and answers.

The first one has been completed for you.

6. Fill in the missing numbers

(a)

$85 \times \square = 8500$

(b)

$\square \times 1000 = 400$

(c)

$\square \times 10 = 457.1$

(d)

$$1900 \div \boxed{\phantom{000}} = 19$$

(e)

$$\boxed{\phantom{000}} \div 10 = 0.05$$

(f)

$$94000 \div \boxed{\phantom{000}} = 94$$

7. (a) Work out  $942 \times 10$

(b) Write down the value of the digit 4 in the answer to (a)

8.

Write down the value of the digit 3 in the answer  $931 \times 100$

9.

Write down the value of the digit 5 in the answer  $125000 \div 100$

10.

Work out twenty thousand divided by one million

11. A coffee shop sells cups of coffee in 0.4 litre cups.

In one day they sell 10000 cups of coffee.

How many litres of coffee do they sell?

12. Carly needs 42000 blocks of Lego to build a large castle.

The lego blocks are sold in boxes of 100.

How many boxes of lego does she need?

13. Work out

(a)  $23 \times 10^2$

(b)  $7 \times 10^3$

(c)  $2.5 \times 10^3$

(d)  $1.8 \times 10^4$

(e)  $0.2 \times 10^2$

(f)  $0.0006 \times 10^2$

14. Work out

(a)  $4000 \div 10^2$

(b)  $25000 \div 10^3$

(c)  $170 \div 10^2$

(d)  $9300 \div 10^4$

(e)  $98 \div 10^2$

(f)  $54 \div 10^3$

## Workout

Question 1: Work out

- |                           |                            |                         |                          |
|---------------------------|----------------------------|-------------------------|--------------------------|
| (a) $7 + 2 \times 3$      | (b) $9 + 4 \times 2$       | (c) $10 + 2 \times 2$   | (d) $18 + 4 \div 2$      |
| (e) $20 - 5 \times 2$     | (f) $8 - 2 \times 3$       | (g) $21 - 9 \div 3$     | (h) $100 - 40 \times 2$  |
| (i) $16 \div 1 - 3$       | (j) $5 + 5 \times 5$       | (k) $13 - 7 \div 1$     | (l) $7 \times 6 - 4$     |
| (m) $9 + 3 - 2$           | (n) $20 - 5 + 6$           | (o) $21 - 17 + 4$       | (p) $30 \times 4 \div 2$ |
| (q) $(7 + 7) \div 2$      | (r) $35 - (9 + 3)$         | (s) $40 \times (2 + 3)$ | (t) $60 \div (1 + 5)$    |
| (u) $15 \div (3 + 2)$     | (v) $9 \times (7 + 4)$     | (w) $90 \div (52 - 7)$  | (x) $(8 + 9) \times 3$   |
| (y) $10 + 5 + 3 \times 3$ | (z) $100 - 6 + 2 \times 3$ |                         |                          |

Question 2: Work out

- |                      |                       |                      |                             |
|----------------------|-----------------------|----------------------|-----------------------------|
| (a) $5 - 2^2$        | (b) $7 + 3^2$         | (c) $9^2 + 1$        | (d) $6^2 - 5^2$             |
| (e) $(7 - 2)^2$      | (f) $(4 + 3)^2$       | (g) $(1 + 2)^3$      | (h) $(2 + 8)^3$             |
| (i) $10 - \sqrt{16}$ | (j) $\sqrt{(2 + 14)}$ | (k) $\sqrt{4 + 3^2}$ | (l) $2 \times 5 - \sqrt{4}$ |

Question 3: Work out

- |                               |                              |                              |                            |
|-------------------------------|------------------------------|------------------------------|----------------------------|
| (a) $5 \times 3 + 2 \times 6$ | (b) $9 \div 3 + 15 \times 2$ | (c) $10 \div 2 - 2 \times 1$ | (d) $5 \times (2 + 1) + 4$ |
| (e) $8 + (5 - 1) \times 3$    | (f) $50 - (1 + 4) \times 4$  | (g) $19 \times 2 + 5^2$      | (h) $8^2 + 2 \times 3^2$   |
| (i) $7 \times (8 \div 4)^2$   | (j) $11 + 11 - 6^2 \div 2$   |                              |                            |

Question 4: Copy out the following and insert brackets in each to make the correct answer.

- |                               |                                    |                                     |
|-------------------------------|------------------------------------|-------------------------------------|
| (a) $10 \times 2 + 6 = 80$    | (b) $5 + 5 \div 5 = 2$             | (c) $18 - 6 \div 2 = 6$             |
| (d) $5 + 2 \times 3 + 1 = 13$ | (e) $2 \times 7 + 1 \times 3 = 48$ | (f) $9 + 3^2 \times 10 \div 2 = 90$ |

## Order of Operations (BODMAS)

Video 211 on Corbettmaths

### Apply

Question 1: Matthew says  $9 + 3 \times 2 = 15$ . Is he correct?

Question 2: Samuel says  $6 + 4 \times 9 = 90$ . Is he correct?

Question 3: Using the number 2, 3 and 4 and the operations +, -, and  $\times$  make as many different possible answers.

Question 4: Matilda thinks of a number,  $n$ .  
She adds 2 and then multiplies by 3.

Which expression below is correct?

<b>A</b>	<b>B</b>	<b>C</b>
$n + 2 \times 3$	$3n + 2$	$(n + 2) \times 3$

Question 5: Can you spot any mistakes?

Work out  $9 + 4 \times 3 + 2$

$$= 13 \times 3 + 2$$
$$= 39 + 2$$
$$= 41$$

### Extension Task

Using four number 2's try to make as many different answers as you can.  
You may use +, -,  $\times$ ,  $\div$  and brackets.

You may use one or more of the 2's as powers.

## ORDER OF OPERATIONS

1. Calculate

(a)  $16 - 5 \times 2$

(b)  $10 - 3^2$

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

2. Calculate

(a)  $10 + 3 \times 2$

(b)  $8 \div 2 + 12 \div 4$

(c)  $3 \times 10 \div 5 - 1$

3. Calculate

(a)  $6 + 6 \div 3$

(b)  $8 + 3(5 - 1)$

(c)  $9 \times 2 + 20 \div 2$

4. Put brackets in the following statements to make them true

(a)  $6 \times 7 + 3 - 8 = 52$

(b)  $4 + 3 \times 7 - 1 = 42$

5. Work out

(a)  $14 + 12 \div 2$

(b)  $6 \times 4 - 7 \times 3$

6. Work out

(a)  $2^3 + 3^2$

(b)  $2^2 \times 3^3$

7. Work out  $(2 + 5)^2$

8. Work out

(a)  $(2 + 5)^2$

(b)  $5 + 3 \times 6$

(c)  $22 - 14 \div 2$

(d)  $(9 + 4) \times (100 \div 25)$

(e)  $7 \times 5 - 10$

9. Joey thinks the answer to  $16 + 4 \times 2$  is 40.

Albert thinks the answer to  $16 + 4 \times 2$  is 24.

Who is correct?

Explain your answer.

10. Work out

(a)  $4 \times (3 + 17)$

(b)  $10 - 2 \times 5$

(c)  $30 - 5 \times 2$

### Workout

Question 1: Work out the answers to the following additions

- (a)  $4.5 + 2.3$       (b)  $8.4 + 1.7$       (c)  $0.7 + 0.5$       (d)  $2.8 + 10.3$   
(e)  $13.4 + 28.9$       (f)  $206.2 + 72.8$       (g)  $6.4 + 15.9$       (h)  $0.5 + 0.8 + 0.1$   
(i)  $9.7 + 1.4 + 1.3$       (j)  $16.8 + 3.9 + 102.2 + 87.4$

Question 2: Work out these additions

- (a)  $0.14 + 0.53$       (b)  $0.35 + 0.65$       (c)  $2.47 + 3.34$       (d)  $4.93 + 2.25$   
(e)  $4.77 + 1.84$       (f)  $10.38 + 6.81$       (g)  $7.83 + 12.49$       (h)  $0.56 + 107.08$   
(i)  $9.85 + 2.63 + 0.89$       (j)  $0.08 + 0.12 + 0.87 + 1.93 + 2.06$

Question 3: Complete these additions

- (a)  $6.5 + 1.73$       (b)  $0.56 + 1.6$       (c)  $2.45 + 7.8$       (d)  $8.67 + 3.9$   
(e)  $9.2 + 4.87$       (f)  $1.08 + 2.6$       (g)  $20.6 + 15.84$       (h)  $41.8 + 5.35$   
(i)  $7.4 + 2.329$       (j)  $0.018 + 2.39$       (k)  $9.224 + 8.89$       (l)  $0.293 + 9.815$   
(i)  $4.52 + 0.3 + 0.79 + 1.4$       (j)  $0.94 + 4.8 + 12.09 + 5.63$

### Apply

Question 1: Richard buys a notebook that costs £6.78 and a pen that costs £4.19.  
Work out the total cost.

Question 2: Holly is saving money.  
In January, she saves £15.15  
In February, she saves £8.82  
In March, Holly saves £13.37  
Work out how much she has saved in total.



Question 3: David drives 4.8 miles to Bristol and a further 6.7 miles to Bath.  
Work out how far he drives in total.

## Adding Decimals

### Video 90 on Corbettmaths

Question 4: Mr Jenkins has three pieces of rope.  
The pieces of rope are 2.35m, 1.8m and 3.06m long.  
Work out the total length of the pieces of rope.



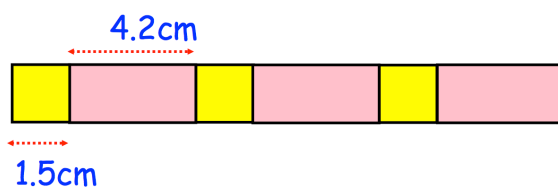
Question 5: Shown is a rectangle.  
Calculate the perimeter.



Question 6: Work out the missing number.

$$\square - 5.28 = 10.9$$

Question 7: Shown is a shape made from three identical squares and three identical rectangles.  
Calculate the perimeter of the shape.



Question 8: The first four terms of a number sequence are  
2.52, 2.71, 2.9, 3.09, ..., ..., ...  
Work out the next two terms.

Question 9: Grace is working out  $12.4 + 3.18$   
Can you spot any mistakes?

	1	2	.4
+	3	.1	8
	4	.4	2

Question 10: Neil writes down four numbers with a sum of 50.  
All the numbers have two decimal places and no two numbers are the same.  
Write down four possible numbers Neil could have written down.

Workout

Question 1: Work out the answers to the following subtractions

- (a)  $0.9 - 0.1$       (b)  $0.8 - 0.3$       (c)  $0.7 - 0.6$       (d)  $0.5 - 0.2$   
(e)  $1.2 - 0.3$       (f)  $1.5 - 0.4$       (g)  $1.8 - 0.6$       (h)  $1.9 - 1.2$   
(i)  $2.4 - 0.5$       (j)  $3.8 - 2.5$       (k)  $4.1 - 1.8$       (l)  $5.5 - 3.1$   
(m)  $8.7 - 1.3$       (n)  $9.2 - 5.8$       (o)  $7.3 - 3.9$       (p)  $8.5 - 0.9$

Question 2: Work out the answers to the following subtractions

- (a)  $7.7 - 1.5$       (b)  $8.5 - 4.1$       (c)  $19.7 - 18.6$       (d)  $26.2 - 5.2$   
(e)  $54.5 - 23.1$       (f)  $80.4 - 10.3$       (g)  $16.6 - 9.2$       (h)  $85.7 - 50.4$   
(i)  $7.3 - 4$       (j)  $8.6 - 2$       (k)  $24.9 - 6$       (l)  $15.1 - 9$   
(m)  $7 - 1.3$       (n)  $9 - 3.6$       (o)  $20 - 4.4$       (p)  $32 - 8.7$

Question 3: Work out these subtractions

- (a)  $0.39 - 0.23$       (b)  $0.47 - 0.15$       (c)  $0.75 - 0.41$       (d)  $0.99 - 0.65$   
(e)  $0.46 - 0.18$       (f)  $0.81 - 0.55$       (g)  $1.24 - 0.72$       (h)  $2.13 - 1.66$   
(i)  $8.63 - 0.4$       (j)  $5.55 - 3.1$       (k)  $8.13 - 0.5$       (l)  $3.84 - 1.9$   
(m)  $10.4 - 0.15$       (n)  $5.8 - 1.92$       (o)  $14.5 - 0.77$       (p)  $12 - 4.55$

Question 4: Complete these subtractions

- (a)  $40.5 - 19.3$       (b)  $88.3 - 52.58$       (c)  $155.73 - 48.89$       (d)  $203.5 - 51.64$   
(e)  $498 - 70.94$       (f)  $500 - 384.11$       (g)  $8200 - 901.3$       (h)  $10000 - 4901.33$

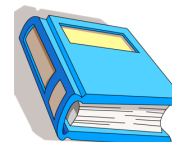
Question 5: Work out each of the following

- (a)  $1.284 - 0.151$       (b)  $2.028 - 1.115$       (c)  $39.45 - 6.061$   
(d)  $40.5 - 7.258$       (e)  $204.1945 - 203.7885$       (f)  $716 - 409.4822$



### Apply

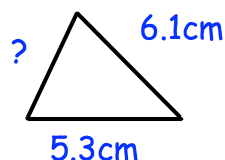
Question 1: Paul buys a book that costs £6.89 and pays with a £10 note.  
How much change should Paul get?



Question 2: Jennifer has 1.2kg of flour.  
She uses 0.75kg of the flour to bake a cake.  
How much flour does she have left?



Question 3: The perimeter of the triangle is 16.1cm.  
Work out the length of the missing side.



Question 4: The first four terms of a number sequence are

15.8, 15.1, 14.4, 13.7, \_\_, \_\_

Work out the next two terms.

Question 5: Find the missing numbers

$$8.41 + \boxed{\phantom{00}} = 25$$

$$17.27 - \boxed{\phantom{00}} = 1.89$$

Question 6: Maxine buys 3 magazines that cost £1.99, £2.45 and £3.70.  
She pays with a £50 note.  
Work out how much change she should receive?

Question 7: Angus is working out  $7.23 - 1.91$   
Can you spot any mistakes?

	7	.	2	3	
-	1	.	9	1	
<hr style="border: 1px solid black;"/>					
	6		7	2	

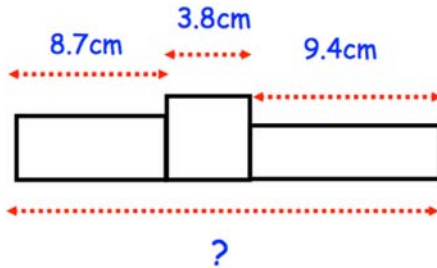
$$7.23 - 1.91 = 672$$

1. Work out

(a)  $17.8 + 2.53$

(b)  $6.2 - 1.77$

2. Three blocks are placed together as shown below.



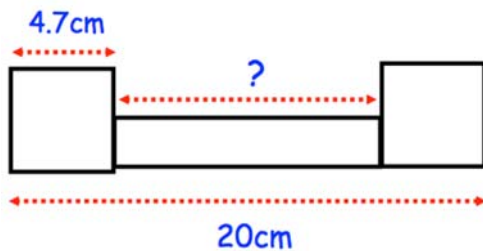
Find the total length of the three blocks.

3. Work out

(a)  $1.5 + 0.36 + 10.4$

(b)  $9.2 - 1.34$

4. Two identical squares and a rectangle are drawn below.



Find the length of the rectangle.

5. Sebastian buys a gift which costs £18.20

He pays with a £20 note.

(a) How much change does he receive?

The change is given in the smallest number of coins.

(b) What coins does Sebastian receive?

6. Add together 0.8 0.113 0.438 and 0.231

7. Jacqui's basic pay is £8.65 per hour.

On a Sunday she gets an extra £1.78 per hour.

Work out how much Jacqui is paid per hour on a Sunday.

8. Luke had £20 with him when he went shopping.  
He bought

2 birthday cards at £2.70 each

1 toy at £6.50 each

1 book at £5.75 each

How much money did he have left after he bought these goods.

9. Chloe has a ribbon 8 metres long.

She cuts two pieces from the ribbon.

The first piece was 1.28 metres long.

The second piece was 0.65 metres long.

How much ribbon is left?

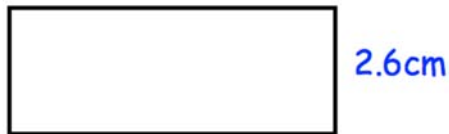
10. Peter is 1.64 metres tall.

Peter is 18 centimetres taller than Nick.

Work out Nick's height in metres.

11. Shown below is a rectangle.

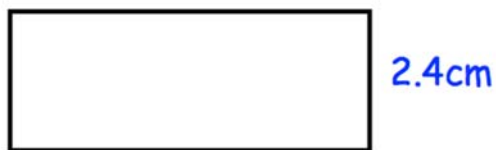
5.3cm



Find the perimeter of the rectangle.

12. Shown below is a rectangle with perimeter 15.2cm

x



Find the length of the rectangle.

Name: \_\_\_\_\_

Exam Style Questions

## Decimals: Addition and Subtraction



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

### Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

## Secondary

Video 90

Video 91



1. Work out

(a)  $17.8 + 2.53$

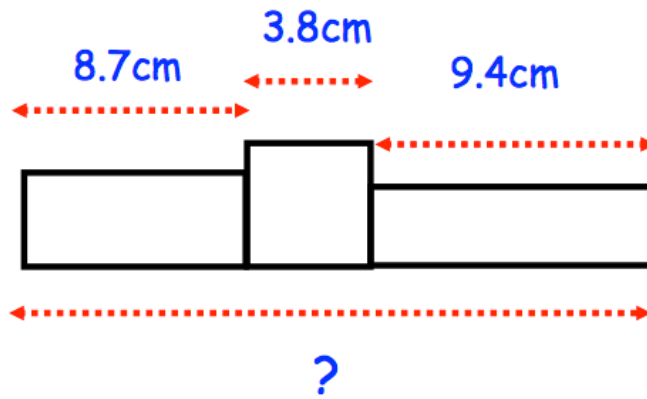
.....

(b)  $6.2 - 1.77$

.....  
(2)

---

2. Three blocks are placed together as shown below.



Find the total length of the three blocks.

.....cm  
(2)

3. Work out

(a)  $1.5 + 0.36 + 10.4$

.....

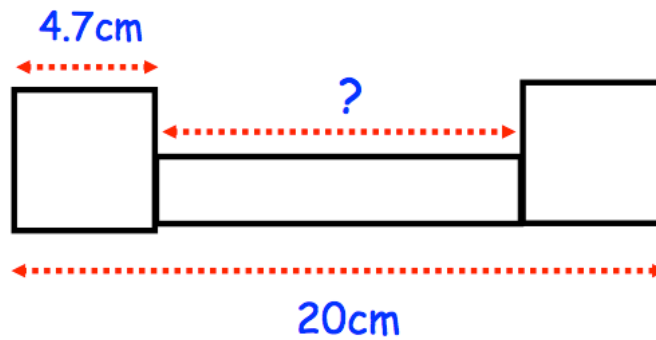
(b)  $9.2 - 1.34$

.....

(2)

---

4. Two identical squares and a rectangle are drawn below.



Find the length of the rectangle.

.....cm

(3)

5. Sebastian buys a gift which costs £18.20  
He pays with a £20 note.

(a) How much change does he receive?

.....  
(1)

The change is given in the smallest number of coins.

(b) What coins does Sebastian receive?

.....  
(1)

---

6. Add together 0.8 0.113 0.438 and 0.231

.....  
(2)

7. Jacqui's basic pay is £8.65 per hour.  
On a Sunday she gets an extra £1.78 per hour.

Work out how much Jacqui is paid per hour on a Sunday.

£.....  
(2)

---

8. Luke had £20 with him when he went shopping.  
He bought

2 birthday cards at £2.70 each  
1 toy at £6.50 each  
1 book at £5.75 each

How much money did he have left after he bought these goods.

£.....  
(4)



9. Chloe has a ribbon 8 metres long.

She cuts two pieces from the ribbon.  
The first piece was 1.28 metres long.  
The second piece was 0.65 metres long.

How much ribbon is left?

.....m  
(3)

---

10. Peter is 1.64 metres tall.  
Peter is 18 centimetres taller than Nick.

Work out Nick's height in metres.

.....m  
(1)

11. Shown below is a rectangle.

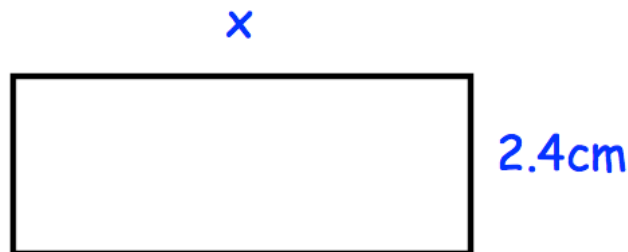


Find the perimeter of the rectangle.

.....cm  
(2)

---

12. Shown below is a rectangle with perimeter 15.2cm



Find the length of the rectangle.

.....cm  
(3)

# Multiplying and Dividing by 10, 100 and 1000

10 000	1000	100	10	1	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					●			

## Multiplying

X 10      digits move LEFT **1** space  
 X 100    digits move LEFT **2** spaces  
 X 1000   digits move LEFT **3** spaces



## Dividing

÷ 10      digits move RIGHT **1** space  
 ÷ 100    digits move RIGHT **2** spaces  
 ÷ 1000   digits move RIGHT **3** spaces



0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

# Multiplying and Dividing by 10, 100 and 1000

Use your number cards and template worksheet to help you answer these questions:

- a)  $7 \times 10 =$
- b)  $13 \times 10 =$
- c)  $5.43 \times 10 =$
- d)  $34.1 \times 100 =$
- e)  $32 \times 100 =$
- f)  $1.234 \times 100 =$
- g)  $3.2 \times 1000 =$
- h)  $0.32 \times 1000 =$
- i)  $0.001 \times 1000 =$
- j)  $43 \div 10 =$
- k)  $432 \div 10 =$
- l)  $0.2 \div 10 =$
- m)  $432 \div 100 =$
- n)  $121.3 \div 100 =$
- o)  $0.2 \div 100 =$

- p)  $3234 \div 1000 =$
- q)  $433 \div 1000 =$
- r)  $7 \div 1000 =$
- s)  $0.003 \times 10 =$
- t)  $32.003 \times 100 =$
- u)  $399.9 \div 10 =$
- v)  $3.333 \times 1000 =$
- w)  $87230 \div 1000 =$
- x)  $0.203 \times 100 =$
- y)  $0.001 \times 10\ 000 =$
- z)  $132.345 \div 1000 =$

Finished? Make up some of your own then solve them

# Multiplying and Dividing by 10, 100 and 1000

## ANSWERS

- a)  $7 \times 10 = 70$   
b)  $13 \times 10 = 130$   
c)  $5.43 \times 10 = 54.3$   
d)  $34.1 \times 100 = 3410$   
e)  $32 \times 100 = 3200$   
f)  $1.234 \times 100 = 123.4$   
g)  $3.2 \times 1000 = 3200$   
h)  $0.32 \times 1000 = 320$   
i)  $0.001 \times 1000 = 1$   
j)  $43 \div 10 = 4.3$   
k)  $432 \div 10 = 43.2$   
l)  $0.2 \div 10 = 0.02$   
m)  $432 \div 100 = 4.32$   
n)  $121.3 \div 100 = 1.213$   
o)  $0.2 \div 100 = 0.002$   
p)  $3234 \div 1000 = 3.234$   
q)  $433 \div 1000 = 0.433$   
r)  $7 \div 1000 = 0.007$   
s)  $0.003 \times 10 = 0.03$   
t)  $32.003 \times 100 = 3200.3$   
u)  $399.9 \div 10 = 39.99$   
v)  $3.333 \times 1000 = 3333$   
w)  $87230 \div 1000 = 87.23$   
x)  $0.203 \times 100 = 20.3$   
y)  $0.001 \times 10\ 000 = 10$   
z)  $132.345 \div 1000 = 0.132345$

Finished? Make up some of your own then solve them