

# Maths answers

Monday

## Divide by 10



1 Complete the calculation shown by the array.



$$40 \div 10 = \boxed{4}$$

2 Complete the calculations.

a)  $30 \div 10 = \boxed{3}$

b)  $60 \div 10 = \boxed{6}$

c)  $90 \div 10 = \boxed{9}$

d)  $80 \div 10 = \boxed{8}$

e)  $100 \div 10 = \boxed{10}$

f)  $\boxed{12} = 120 \div 10$

3 Balloons come in bags of 10

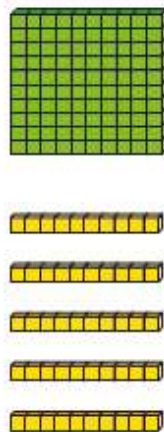
Huan has 130 balloons.

How many bags does he have?

Huan has  $\boxed{13}$  bags of 10 balloons.



4 a) Whitney makes 150 using base 10



I am going to exchange my hundred for tens

Complete the sentences.

150 = 1 hundred +  $\boxed{5}$  tens

1 hundred =  $\boxed{10}$  tens

Whitney has  $\boxed{15}$  tens altogether.

$150 \div 10 = \boxed{15}$

b) Make 230 using base 10

Complete the sentences.

230 =  $\boxed{2}$  hundreds +  $\boxed{3}$  tens

$\boxed{2}$  hundreds =  $\boxed{20}$  tens

There are  $\boxed{23}$  tens altogether.

$230 \div 10 = \boxed{23}$



- 5 Mr Smith has this amount of money.



He buys some rulers costing 10p each.



Mr Smith spends all of his money.  
How many rulers does he buy?

25

- 6 Aisha has a bag of 10p coins.  
She has £3 and 40p altogether.  
How many 10p coins does Aisha have?

Aisha has  10p coins.



- 7 Fill in the missing numbers.

a)  $360 \div 10 =$

b)  $630 \div 10 =$

c)  $10 \times$    $= 520$

f)  $86 =$   tens  $\div 10$

d)   $\div 10 = 41$

e)   $= 75$  tens  $\div 10$

- 8 A pool is 10 m long.

Annie and Mo are swimming lengths of the pool.

Annie swims 85 lengths.

Annie and Mo swim 1,240 m in total.

How many lengths does Mo swim?

39

- 9 Complete the calculations.

a)  $360 \div 10 \div 3 =$

c)  $720 \div 10 \div$    $= 8$

b)  $450 \div 10 \div 5 =$

d)   $\div 10 \div 4 = 1$

Monday



## Divide by 100

- 1 There are 400 pins altogether.  
The pins are packed in jars of 100  
How many jars are there?



- 2 Complete the calculations.
- a)  $700 \div 100 =$        d)  $7,000 \div 100 =$
- b)  $800 \div 100 =$        e)  $8,000 \div 100 =$
- c)  $200 \div 100 =$        f)  $20 = 2,000 \div 100$



- 3 a) Teddy makes 2,300 using base 10



Complete the sentences.

$2,300 = 2$  thousands +  hundreds

1 thousand =  hundreds

2 thousands =  hundreds

Teddy has  hundreds altogether.

$2,300 \div 100 =$

- b) Make 3,700 using base 10  
Complete the sentences.

$3,700 = 3$  thousands +  hundreds

3 thousands =  hundreds

There are  hundreds altogether.

$3,700 \div 100 =$

- 4
- a) One hundred 1p coins is equal to £1
- d) Dexter has seven hundred 1p coins.  
How many £1 coins is this equal to?

- b) Aisha has seven thousand 1p coins.  
How many £1 coins is this equal to?

- d) Jack has 170 1p coins.  
He says, "This is the same as £17"  
Is Jack correct?
- How do you know?

It is £1 and 70p

5 Complete the number sentences.

a)  $40 \div 10 =$

b)  $80 \div 10 =$

$400 \div 10 =$

$800 \div 10 =$

$400 \div 100 =$

$800 \div 100 =$

$4,000 \div 100 =$

$8,000 \div 100 =$

What patterns can you see?

6 Complete the calculations.

a)  $100 \times$    $= 1,200$

d)   $\div 100 = 35$

b)  $6,200 \div 100 =$

e)   $= 35$  hundreds  $\div 100$

c)  $100 \times$    $= 5,200$

f)  $96 =$   hundreds  $\div 100$

7 Eva and Tommy collect gems in a computer game.

Each gem is worth 100 points.

At the end of the game, Eva has 4,300 points and Tommy has 800 points.

How many gems did they collect in total?



How did you work this out?

8 Use the digit cards to fill in the gaps.

You may use each digit card once only.

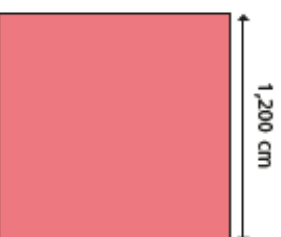


$3\underline{\quad} \times 100 = \underline{3},400$

$6,\underline{2}00 \div 100 = \underline{62}$

$\underline{5},500 = 10 \times \underline{1}0 \times 55$

9 The side length of a square is 1,200 cm.



a) What is the perimeter of the square in metres?

b) A rectangle has the same perimeter.

What could the length and width of the rectangle be?

length =  width =

*Various answers.*

Tuesday

## Divide by 10, 100 and 1,000



1 Complete the division sentences.

Th	H	T	O
	6	0	0

$$60 \div 10 = \boxed{6}$$

Th	H	T	O
	4	9	0

$$490 \div 10 = \boxed{49}$$

Th	H	T	O
1	4	9	0

$$1,490 \div 10 = \boxed{149}$$

d) What happens to the digits when you divide a number by 10?

*They move one place to the right.*

2 Complete the division sentences.

a)  $90 \div 10 = \boxed{9}$

e)  $32,390 \div 10 = \boxed{3,239}$

b)  $750 \div 10 = \boxed{75}$

f)  $6,200 \div 10 = \boxed{620}$

c)  $820 \div 10 = \boxed{82}$

g)  $700 \div 10 = \boxed{70}$

d)  $\boxed{146} = 1,460 \div 10$

h)  $92,000 \div 10 = \boxed{9,200}$

3 Complete the divisions.

HTH	TTh	Th	H	T	O
			9	0	0

$$900 \div 100 = \boxed{9}$$

HTH	TTh	Th	H	T	O
	1	6	0	0	0

$$16,000 \div 100 = \boxed{160}$$

HTH	TTh	Th	H	T	O
		9	0	0	0

$$9,000 \div 1,000 = \boxed{9}$$

HTH	TTh	Th	H	T	O
7	6	8	0	0	0

$$768,000 \div 1,000 = \boxed{768}$$

4 Explain to a partner how to divide a number by 100

Ask them to explain to you how to divide a number by 1,000

5 Complete the division sentences.

a)  $4,500 \div 10 = \boxed{450} \div 10 = 76$

$62,000 \div 10 = \boxed{6,200} \div 100 = 76$

$739,300 \div 10 = \boxed{73,930} \div 1,000 = 76$

b)  $4,500 \div 100 = \boxed{45} \div 1,000 = 30$

$62,000 \div 100 = \boxed{620} \div 1,000 = 300$

$739,300 \div 100 = \boxed{7,393} \div 1,000 = 3,000$

Wednesday



- 6 Complete the table.

Number	Number divided by 10	Number divided by 100	Number divided by 1,000
65,000	6,500	650	65
72,000	7,200	720	72
350,000	35,000	3,500	350

- 7 Write  $>$ ,  $<$  or  $=$  to make the statements true.

a)  $4,900 \div 10$   $>$   $4,900 \div 100$

b)  $56,000 \div 100$   $<$   $65,000 \div 100$

c)  $93,000 \div 1,000$   $=$   $9,300 \div 100$

d)  $5,700 \div 100$   $>$   $5,700 \div 1,000$

- 8 Complete the sentences.

a) Dividing a number by 10 and then by 10 again is the same as dividing by 100

b) Dividing a number by 1,000 is the same as dividing by 10

and then by 100

Compare answers with a partner.

- 9 In 2019, 568,000 houses were built.

In 2018, 10 times fewer houses were built.  
In 2017, 100 times fewer houses were built.

a) How many houses were built in 2018?

56,800 houses

b) How many houses were built in 2017?

5,680 houses

c) How many houses were built between 2017 and 2019?

630,400 houses

- 10 Alex is thinking of a number.  
She divides it by 100.

The answer has one more in the hundreds column than in the tens column.

The total of the digits is 15.  
What could the number be?

87,000

How many different answers can you find?

## Multiples of 10, 100 and 1,000



- 1 Mo is multiplying numbers by 20

To multiply by 20, I multiply first by 2 and then by 10



- a) Use Mo's method to complete the multiplication sentences.

$$7 \times 20 = \boxed{140}$$

$$12 \times 20 = \boxed{240}$$

$$20 \times 134 = \boxed{2680}$$

- b) Would you get the same answer if you multiplied by 10 first and then by 2? yes

Write an example.

$$7 \times 2 \times 10 = 14 \times 10 = 140$$

$$7 \times 10 \times 2 = 70 \times 2 = 140$$

- 2 Complete the sentences.

- a) To multiply by 50, you multiply by 5 first and then by

- b) To multiply by 200, you multiply by  first and then by

- c) To multiply by 7,000 you multiply by  first and then by

- 3 Complete the multiplication sentences.

Show all the steps in your thinking.

a)  $7 \times 500 = \boxed{3,500}$

b)  $6,000 \times 8 = \boxed{48,000}$

c)  $300 \times 90 = \boxed{27,000}$

d)  $500 \times 300 = \boxed{150,000}$

- 4 Complete the calculations.

a)  $300 \times \boxed{30} = 9,000$       d)  $\boxed{300} \times 90 = 27,000$

b)  $6,000 \times \boxed{3} = 18,000$       e)  $500 \times 60 = \boxed{30,000}$

c)  $700 \times \boxed{40} = 28,000$       f)  $8,000 \times \boxed{90} = 720,000$

- 5

$$\boxed{42 \times 3 = 126}$$

Use this fact to solve the calculations.

a)  $42 \times 30 = \boxed{1,260}$       c)  $300 \times 42 = \boxed{12,600}$

b)  $420 \times 3 = \boxed{1,260}$       d)  $42 \times 3,000 = \boxed{126,000}$

Thursday



- 6 Here are two methods to solve  $16 \times 50$

<b>Method 1</b>	<b>Method 2</b>
$16 \times 10 \times 5$	$16 \times 5 \times 10$
$= 160 \times 5$	$= 80 \times 10$
$= 800$	$= 800$

- a) What is the same about the methods?  
What is different?

- b) What other method could you use to multiply by 50?

Show your method.

e.g.  $16 \times 100 \div 2 = 1,600 \div 2 = 800$

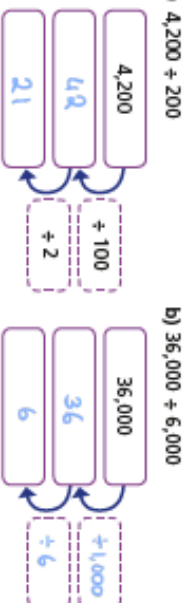
- c) Share your method with a partner.

- 7 Jack and Mo are calculating  $3,500 \div 70$

<b>Jack's workings</b>	<b>Mo's workings</b>
$3,500 \div 10 = 350$	$3,500 \div 10 = 350$
$350 \times 7 = 2,450$	$350 \div 7 = 50$

- a) Whose workings are correct? Mo  
b) What mistake has the other person made?

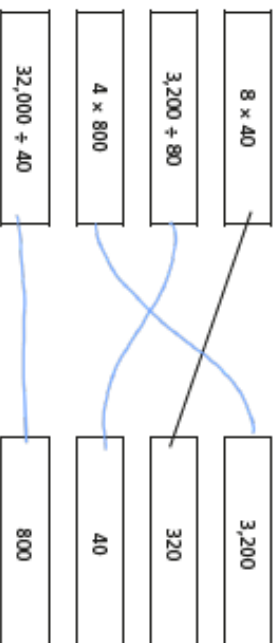
- 8 Complete the division diagrams.



Complete the division sentences.

c)  $3,200 \div 80 =$        d)  $72,000 \div 9,000 =$    
 $3,200 \div 800 =$         $72,000 \div 900 =$    
 $72,000 \div 90 =$

- 9 Match the calculations to the answers.  
One has been done for you.



- 10 The answer is 400  
What could the question be?  
Write 4 division and 4 multiplication questions.  
Ask a partner to check your questions.

Thursday



## Measure perimeter



1 What is the length of each line?



1.6 cm

c)

3 cm

b)

1.5 cm

d)

0.7 cm

2 How long is the pencil?

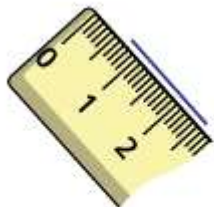


12.5 cm

3 Dexter is measuring the length of a line.



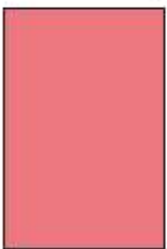
I think that the line is 2.6 cm long.



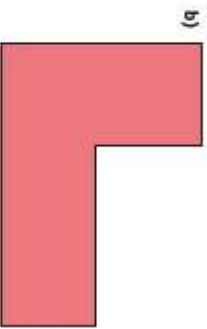
Do you agree with Dexter? No  
Explain why.

Dexter hasn't started measuring from 0 cm.

4 Measure the sides of the shape to work out the perimeter.



13 cm



16 cm

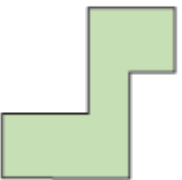
How many sides did you have to measure for each shape?

- 5 By measuring, work out the perimeter of these shapes.

a)



b)

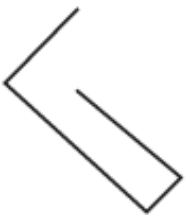


13.2cm

10.9 cm

- 6 Complete the shape so that it has a perimeter of 15.6 cm.

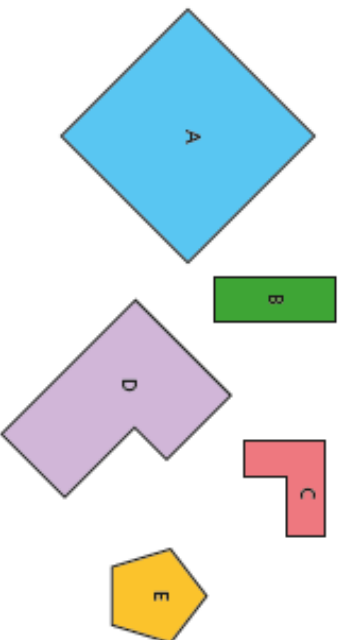
*Various answers.*



- 7 Draw a quadrilateral and pentagon with a perimeter of 10 cm.

*Various answers.*

- 8 Sort the shapes into the correct categories.



	Regular	Irregular
Perimeter less than 10 cm	E	B C
Perimeter greater than 10 cm	A	D

Friday