



W.C. 4th May 2020

<https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-lessons/1>

Maths ANSWERS

Monday

Area model/Grid method

Mild

$$45 \times 42 = 1890$$

$$52 \times 24 = 1246$$

$$34 \times 43 = 1462$$

Eva's calculation
does not include
 20×7 and 50×3

Children can show
this with concrete
or pictorial
representations.

Medium

$$12 \times 15 = 180$$

$$\text{Purple} = 10 \times 10 = 100$$

$$\text{Pink} = 5 \times 10 = 50$$

$$\text{Blue} = 10 \times 2 = 20$$

$$\text{Yellow} = 5 \times 2 = 10$$

Therefore it is again $15 \times 12 = 180$

Amir needs 8 more hundreds,
 $40 \times 40 = 1,600$
and he only has 800

His calculation is
 $42 \times 46 = 1,932$

Spicy

$$14 \times 32 = 448$$

$$14 \times 23 = 322$$

$$25 \times 16 = 400$$

$$33 \times 15 = 495$$

$$22 \times 51 = 1122$$

X 60 9

50

5

Tuesday

Multiplying by a 2 digit number

Mild

2 Fill in the missing numbers.

a)

			4	3	
	x		1	3	
		1	2	9	
		4	3	0	
		5	5	9	

(43 × 3)

(43 × 10)

c)

			2	1	
			2	5	
	x				
			1	0	5
			4	2	0
			5	2	5

(21 × 5)

(21 × 20)

b)

			2	1	
	x		1	6	
		1	2	6	
		2	1	0	
		3	3	6	

(21 x 6)

(21 x 10)

4 Work out the multiplications.

a) $52 \times 34 = 1,768$

c) $46 \times 64 = 2,944$

A blank sheet of graph paper with a grid pattern. The grid consists of 20 columns and 10 rows of squares. The lines are light blue and form a uniform grid across the entire page.

b) $22 \times 56 = 1,232$

d) $47 \times 63 = 2,961$

- 5 A machine prints 92 labels every minute.
How many labels will it print in three-quarters of an hour?

4,140

Medium

- 2 Complete the multiplications.

a)

			2	3	1
	x			1	3
			6	9	3
		2	3	1	0
		3	0	0	3
		1	1		

 (231×3) (231×10)

b)

			5	1	2	
	x			2	4	
		2 ₂	0	4	8	
	1 ₁	0	2	4	0	
		1	2	2	8	8

$$(512 \times 4)$$
$$(512 \times 20)$$

- 4 Complete the multiplications.

a) $142 \times 31 = 4,402$

c) $214 \times 53 = 11,342$

[illegible]

b) $337 \times 46 = 15,502$

d) $24 \times 183 = 4,392$

[illegible]

- 5 Some children are asked to work out 308×19

a) Which is the best estimate to use to check their answers?

Circle your choice and work out the answer to your estimate.

 300×10

300 x 20

 310×20 300×19

estimate answer = 6,200

b) Explain the reasons for your choice.

c) Here are answers given by three children.

Nijah 28,028

Filip	5,852
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Whitney 2,080

From your estimate, who do you think is correct? Filip

d) Work out the correct answer.

5,852

Spicy

- 2 Tommy is calculating $1,234 \times 26$

a) Complete his working out.

			1	2	3	4	
	x				2	6	
			7 ₁	4 ₂	0 ₂	4	
		2	4	6	8	0	
		3	2	0	8	4	
		1					

$$\begin{array}{r} (1,234 \times 6) \\ (1,234 \times 20) \end{array}$$

- b) Fill in the grid to check Tommy's working is accurate.
You may use place value counters to help.

x	1,000	200	30	4
20	20,000	4,000	600	80
6	6,000	1,200	180	24

- 3 Rosie is calculating $2,541 \times 42$
Here is Rosie's working.

	2	5	4	1	
x			4	2	
	4 ₁	0	8	2	(2,541 × 2)
	8 ₂	0 ₁	6	4	(2,541 × 40)
	1 ₁	2	1 ₁	4	6

- a) Rosie has made two mistakes. What are they?

She hasn't correctly exchanged
She has multiplied by 4 not 40

- b) What is the correct answer?

106,722

- 8 Amir scores 4,680 points in a computer game for 12 games in a row.

Whitney scores 2,512 points every game for 24 games.

Who scores more points?

Amir: 56,160

Whitney: 60,288

How many more?

Whitney

4,128

Wednesday

Short division with remainders

Mild, Medium and Spicy - Log on to Timetable Rockstars and compete in the Battles we have set up!



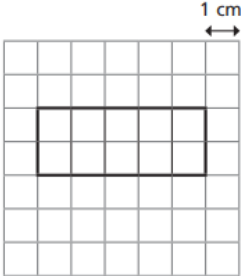
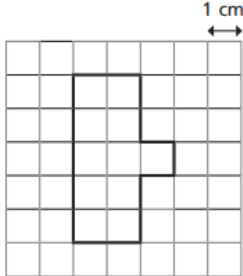
Be sure to check the answers for this task on the BBC Bitesize website.

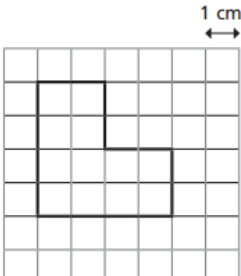
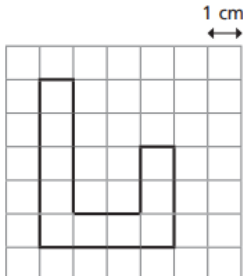
Thursday

Calculating perimeter

Mild

1 Calculate the perimeter of each shape.

a)  

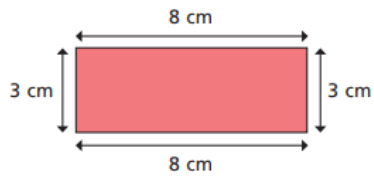
b)  

14 cm 16 cm

16 cm 22 cm

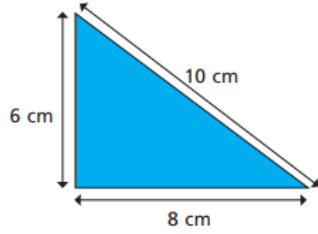
2 Calculate the perimeter of these shapes.

a)



22 cm

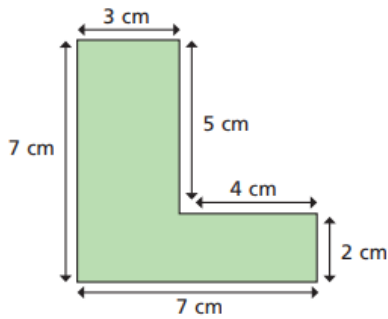
b)



24 cm

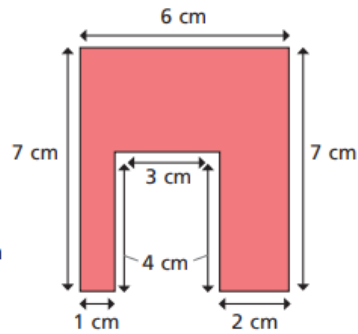
3 Calculate the perimeter of these shapes.

a)



28 cm

b)

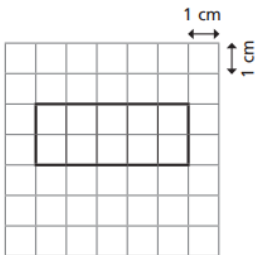


34 cm

Medium

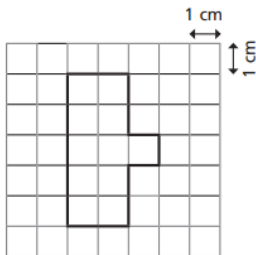
1 Calculate the perimeter of each shape.

a)



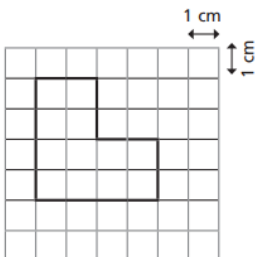
14 cm

d)



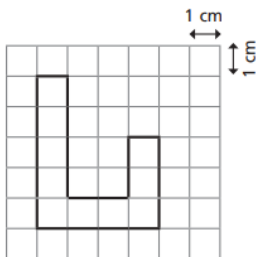
16 cm

b)



16 cm

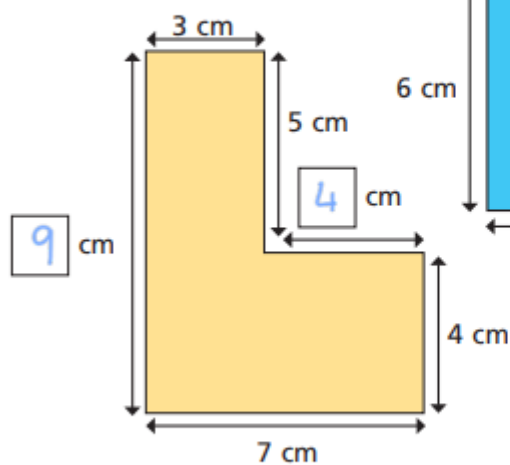
d)



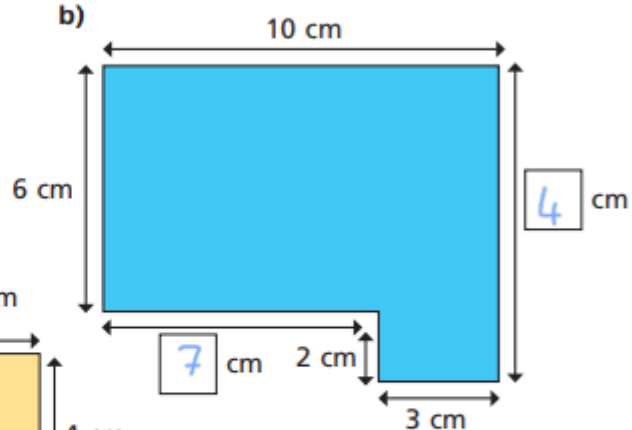
22 cm

4 Work out the missing lengths on these shapes.

a)



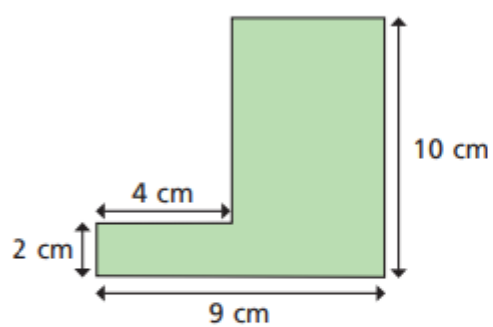
b)



Discuss with a partner how you worked them out.

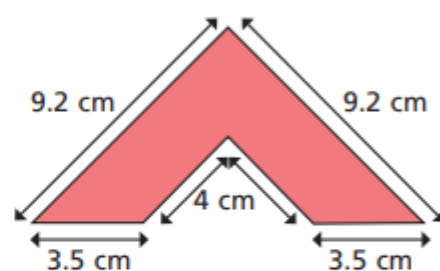
5 Calculate the perimeter of these shapes.

a)



38cm

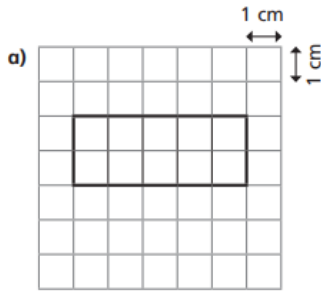
b)



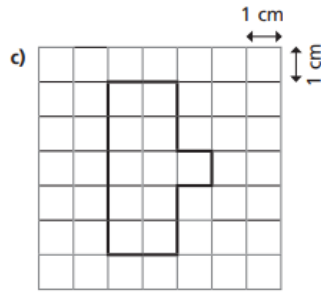
33.4cm

Spicy

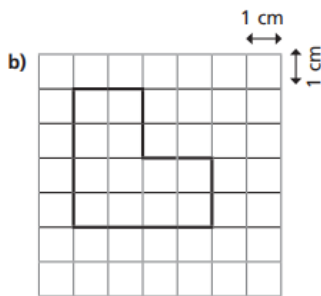
- 1 Calculate the perimeter of each shape.



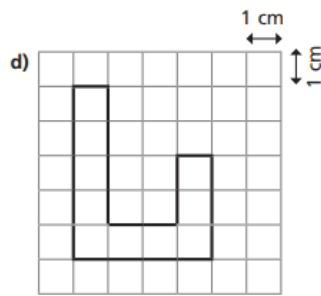
14 cm



16 cm



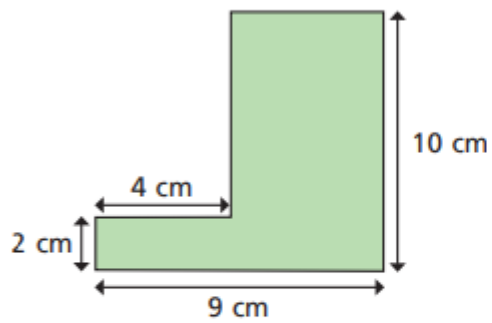
16 cm



22 cm

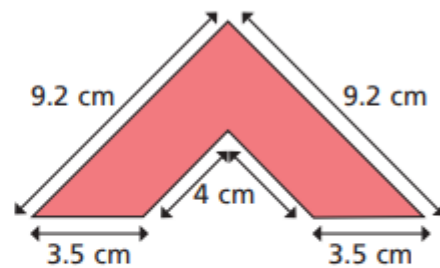
- 5 Calculate the perimeter of these shapes.

a)



38 cm

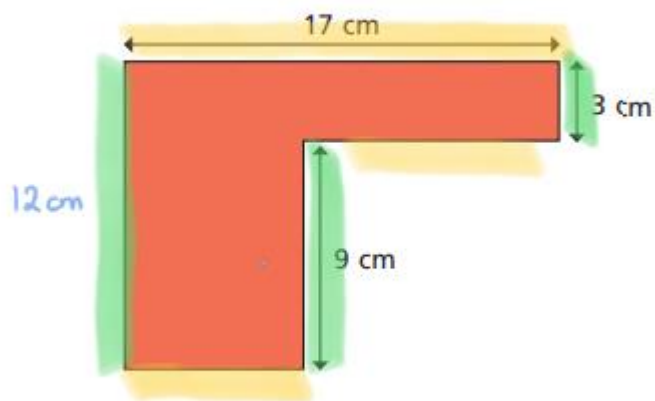
b)



33.4 cm

- 6 Mo thinks that there is not enough information to calculate the perimeter of the shape.

Is he correct? How do you know?



NO. The perimeter is 58 cm.

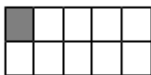
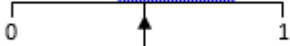
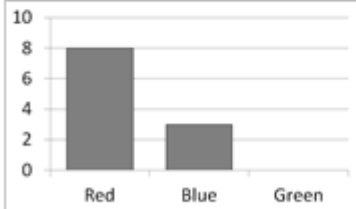
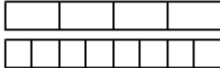
Friday

Today you may wish to challenge yourself with the online challenges or the Key Skills tasks! But make sure to have plenty of fun with maths today!

Key Skills and Rockstars

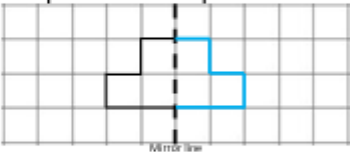
Mild

A: Place Value, Add and Subtract	
1. What is the missing number? 0 8 24 32	^{3:1} 16
2. What is the 2 worth in this number? 257	^{3:2} 200 (hundreds)
3. Put these in order, smallest first. 293 329 932 392	^{3:3} 293, 329, 392, 932
4. Draw an arrow to label 40. 	^{3:4} Arrow
5. Circle all the multiples of 8. 6 8 14 16 20	^{3:5} 8, 16
6. $462 + 100 =$	^{3:6} 562
7. $256 + 128 =$	^{3:7} 384
8. Write the sum to check $82 - 37 = 45$. Check: $45 + \text{$ = $\text{$	^{3:8} 37, 82
9. To a no. I add 27 then subtract 19. I now have 13. What did I start with?	^{3:9} 5
10. What is the missing number? $149 + \text{$ = 211	^{3:9} 62

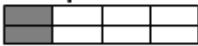
B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
11. $36 \div 3 =$	3:10	23. About how long does it take for a full kettle to boil? a. 50 seconds b. 5 minutes c. 50 minutes 	3:23
12. $8 \times 3 =$	3:10		
13. Use $5 \times 6 = 30$ to solve: $300 \div 6 =$	3:11	22. Which of these is a correct description of a cuboid? a. I have 6 faces and 6 vertices. b. I have 6 edges and 8 vertices. c. I have 6 faces and 12 edges.	3:25
14. Eggs come in boxes of 6. I need 20 eggs. How many boxes should I buy?	3:12		
15. What fraction is shaded? 	3:13	23. Label two acute angles using the letter 'A'. 	3:26
16. Circle $\frac{3}{5}$ of the marbles. 	3:14		
17. What fraction is labelled? 	3:15	24. Favourite colours of students: 	3:29
18. $\frac{1}{4} = \frac{?}{8}$ 	3:16		
19. Subtract the fractions. $\frac{7}{8} - \frac{3}{8}$	3:17		
20. Write the largest fraction. $\frac{2}{5} \quad \frac{1}{5} \quad \frac{4}{5} \quad \frac{3}{5}$	3:18	25. How many more people said 'Red' than said 'Blue'?	3:30
Total (B)		Total (C)	

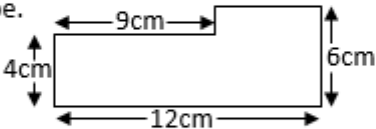
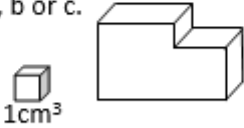
Medium

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions	
1. What is the missing number? 1,000 2,000 4,000 5,000	^{4:1} 3,000	11. $9 \times 9 =$	^{4:9} 81
2. What is the missing number? 200 225 250 275	^{4:1} 300	12. Complete the sum that is equal to $4 \times 5 \times 18:$ $20 \times$	^{4:10} 18
3. Round this number to the nearest 1,000: 3,192	^{4:2} 3,000	13. $932 \times 4 =$	^{4:11} 3,728
4. What is 1,000 more than 6,394?	^{4:2} 7,394	14. To work out 4×55 you could do: $50 \times$ $+$ $\times 4$	^{4:12} 4, 5
5. If the temperature starts at 5°C, then drops by 9°C, what is it now?	^{4:3} -4	15. $\frac{35}{40} = \frac{7}{?}$	^{4:13} 8
6. What is the value of the 8 in this number? 6,283	^{4:4} 80	16. What is the missing number? 9.96 9.97 9.98 9.99	^{4:14} 10(.00)
7. Write the number 74 in Roman numerals.	^{4:5} LXXIV	17. $\frac{2}{5} + \frac{4}{5}$	^{4:15} $\frac{6}{5}$
8. $4,115 - 1,472 =$	^{4:6} 2,643	18. Write 0.8 as a fraction.	^{4:16} $\frac{8}{10}$
9. Estimate the answer to: $15,507 + 4,489$	^{4:7} 20,000	19. $293 \div 10 =$	^{4:17} 29.3
10. From 300 tickets, pupils buy 89 & parents buy 184. How many are left?	^{4:8} 27	20. Using £20 Rob buys a DVD for £6 and a CD for £6.95. How much left?	^{4:18} £7.05
Total (A)		Total (B)	

C: Measure, Geometry and Statistics							
21. How many millilitres are there in 2.15 litres?	4:19 2,150						
22. Tick (✓) the shape that has exactly 2 lines of symmetry. 	4:25 <u>Rect-</u>angle						
23. Complete this shape: 	4:26 Lines drawn						
24. Number of tyres sold by a garage one weekend: <table border="1" data-bbox="502 817 948 1003"> <tr> <td colspan="2">Key: $\oplus$ = 4 tyres</td></tr> <tr> <td>Saturday</td><td>$\oplus \oplus \oplus \oplus \in$</td></tr> <tr> <td>Sunday</td><td>$\oplus \oplus \oplus \triangle$</td></tr> </table> 13 <u>were sold on Sunday. Show this.</u> 25. How many tyres <u>were sold in total over the weekend?</u>	Key: $\oplus$ = 4 tyres		Saturday	$\oplus \oplus \oplus \oplus \in$	Sunday	$\oplus \oplus \oplus \triangle$	4:29 <u>Picto-</u>gram drawn 4:30 31
Key: $\oplus$ = 4 tyres							
Saturday	$\oplus \oplus \oplus \oplus \in$						
Sunday	$\oplus \oplus \oplus \triangle$						
Total (C)							

Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions	
1. What is the value of the 4 in this number? 1,348,567	5:1 40,000	11. Which is a common factor of 12 and 20? 3 4 5 6 10	5:8 4
2. Write eight hundred thousand, three hundred and seven in digits.	5:1 800,307	12. Give two prime numbers between 1 and 10.	5:9 2, 3, 5 or 7
3. Round 247,599 to the nearest thousand .	5:2 248,000	13. 628×12	5:10 7,536
4. What is the missing number? 837 937 1,137	5:2 1,037	14. $1,278 \div 100$	5:11 12.78
5. What temperature is 15 degrees less than 6 degrees Celsius?	5:3 -9°C	15. What is <u>7²</u> ?	5:12 49
6. What number is represented by these Roman Numerals? DXXX	5:4 530	16. $\frac{3}{4} + \frac{1}{8} =$	5:13 $\frac{7}{8}$
7. $12,498 - 3,149 =$	5:5 9,349	17. Find an equivalent fraction of $\frac{1}{4}$. 	5:14 $2\frac{2}{8}$ oe
8. $24,829 + 83,592 =$	5:5 108,421	18. Write $\frac{17}{6}$ as a mixed number .	5:15 $2\frac{5}{6}$
9. Complete this sum without written working. $15,200 - 4,150 =$	5:6 11,050	19. $\frac{2}{7} \times 21 =$	5:16 6
10. I buy 2 CDs costing £8.45 each. How much change do I get from £20?	5:7 £3.10	20. Round 2.37 to 1 decimal place.	5:17 2.4
Total (A)		Total (B)	

C: Measure and Problem Solving	
21. Megan and Joe are sharing a pizza. Megan eats 25% of the pizza. Joe eats $\frac{1}{2}$ of the pizza.  What fraction of the pizza is left?	5:19 $\frac{1}{4}$
22. How many centimetres are there in 3.7 metres?	5:20 370
23. Calculate the perimeter of this shape. 	5:21 36cm
24. Estimate the volume of this shape. Write a, b or c. a. 6 cm³. b. 26 cm³. c. 46 cm³. 	5:22 b
25. Sarah gets on a train at 2.30pm. The train journey lasts 110 minutes. What time does Sarah arrive at her destination?	5:23 4.20pm
Total (C)	