



ANSWER SHEET



Monday -

Multiplication and Division Correspondence problems

Starter Answer

Mild

1a. Best buns = 14; Do'Nut Doughnut = 28

2a. $3 \times 4 + 6 \times 3 = 30$

3a. False. The diagram shows $4 \times 4 + 3 \times 2 = 22$

4a. 15

Harry puts some groups of shapes together:



He says that he can represent the total number of vertices by using this number sentence:

$$4 \times 3 + 4 \times 5 = 32$$

How would you represent these shapes in the same way?



$$2 \times 4 + 5 \times 6 = 38$$

Medium

A canteen has 2 types of bread and a choice of 3 sandwich fillings.

Bread	Fillings
white	cheese
brown	tuna
	chicken

a) List the different sandwiches that can be made.

One has been done for you.

cheese on white

cheese on brown

tuna on white

tuna on brown

chicken on white

chicken on brown

b) Complete the multiplication to represent the number of different combinations of bread and filling.

$$2 \times 3 = 6$$

Complete the sentence.

There are 6 combinations.

c) How many combinations would there be if there were 4 choices of sandwich filling?

You have only pentagons, squares and triangles.
How many ways can you find to represent the number 22?

 $3 \times 5 + 1 \times 3 + 1 \times 4 = 15 + 3 + 4 = 22$

 $2 \times 5 + 4 \times 3 = 10 + 12 = 22$

 $2 \times 5 + 3 \times 4 = 10 + 12 = 22$

 $1 \times 5 + 2 \times 4 + 3 \times 3 = 5 + 8 + 9 = 22$

 $4 \times 4 + 2 \times 3 = 16 + 6 = 22$

Mo visits the funfair.

He buys a ticket that allows him to choose 1 ride and 1 game at the fair.

Rides		Games
Big dipper		Hook-a-duck
Dodgems		Basketball
Carousel		Coconut shy
		Lucky dip
		Test-your-strength

a)

There are 8 different possible choices of rides and games.



Is Mo correct? No

Spicy:

Here are the activity choices available at Summer Camp.

Sport	Arts and crafts	Outward bound
football	painting	wall climbing
tennis	pottery	kayaking
golf	mosaics	abseiling
	origami	

Each child is allowed to choose 3 activities per day:

1 sport, 1 arts and crafts and 1 outward bound.

a) How many activity combinations are there?

36

b) Due to a flooded pitch, football is cancelled.

How many combinations are now possible?

There are 24 combinations.

Tom and Esther are building a snowman.

They have a choice of 5 hats, 4 scarves and 2 pairs of gloves to dress their snowman.

How many different combinations are possible?

$$5 \times 4 \times 2 = 40$$

There are 40 combinations.

9a. Fred's Meats = 72, Veggie Verde = 60

Possible solution:
Children may use their knowledge of times tables to help them or they may use trial and error with the shapes to solve it. They may choose to use a table to organise their thoughts.

Possible answers:

24 spiders

16 ants

9 spiders

36 ants

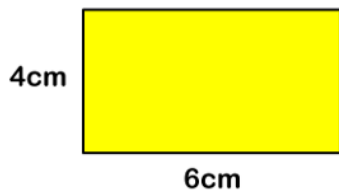
Tuesday

Perimeter of a rectangle

There are lots of possible answers. Here is one that relates to perimeter:
The red rectangle is different because it is the only shape to not have a perimeter of 10 squares. The perimeter of the red rectangle is 12 squares.

Mild:

A rectangle has two pairs of equal sides, so we know that this side must equal 6cm.

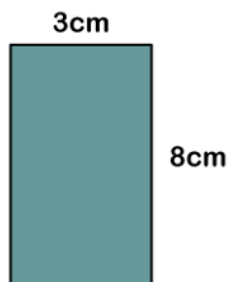


We know that this side must equal 4cm.

1.

$6\text{ cm} + 6\text{ cm} + 4\text{ cm} + 4\text{ cm} = 20\text{ cm}$
 The perimeter is 20 cm.

This is a rectangle, so there are two pairs of side lengths the same.



2.

$8\text{ cm} + 8\text{ cm} + 3\text{ cm} + 3\text{ cm} = 22\text{ cm}$
 The perimeter is 22 cm.

14cm

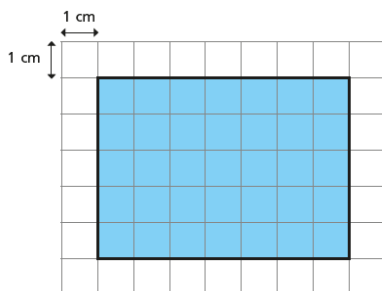
A and B ($4 + 4 + 6 + 6 = 20\text{cm}$)

4cm and 4cm

A = 16cm, B = 18cm, C = 22cm

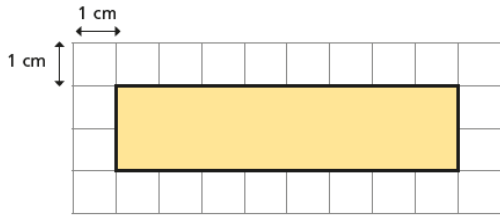
3.

Medium:



1.

$\boxed{5}\text{ cm} + \boxed{7}\text{ cm} + \boxed{5}\text{ cm} + \boxed{7}\text{ cm} = \boxed{24}\text{ cm}$

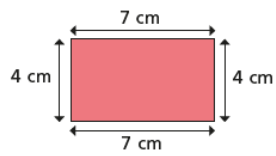


$$2 \text{ cm} + 8 \text{ cm} + 2 \text{ cm} + 8 \text{ cm} = 20 \text{ cm}$$

2.

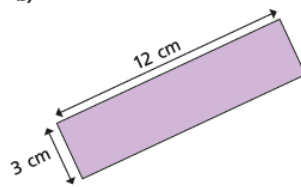
2 Work out the perimeter of the rectangles.

a)



22 cm

b)



30 cm

3.

4. $6 + 16 = 22 \text{ cm}$

$$22 \times 2 = 44 \text{ cm}$$

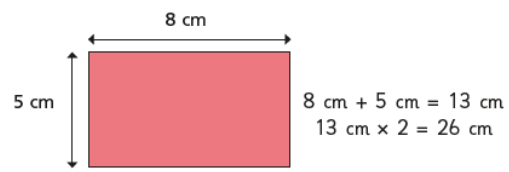
$$9 + 9 = 18 \text{ cm}$$

$$18 \times 2 = 36 \text{ cm}$$

5.

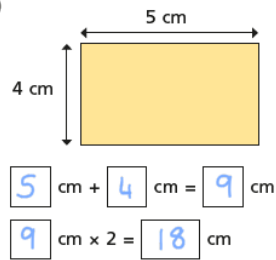
Spicy:

Tommy is working out the perimeter of some rectangles.

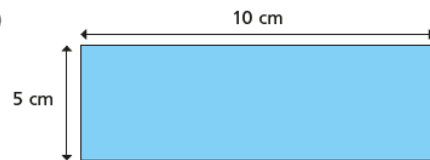


Use Tommy's method to find the perimeter of these rectangles.

a)



b)



$$10\text{ cm} + 5\text{ cm} = 15\text{ cm}$$
$$15\text{ cm} \times 2 = 30\text{ cm}$$

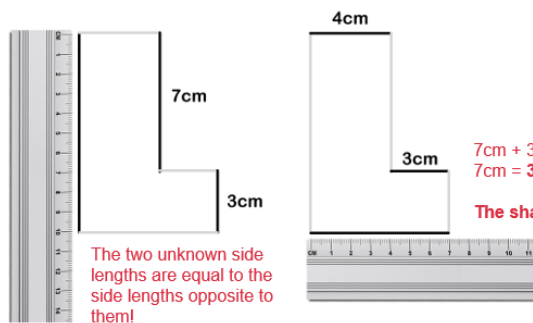
If the perimeter is: 20 m Length = 6 m Width = 4 m 24 m Length = 7 m Width = 5 m 28 m Length = 8 m Width = 6 m	Always because when adding an odd and an odd they always equal an even number.
4 cm 6 cm	24 cm Sides = 6 cm 44 cm Sides = 11 cm 64 cm Sides = 16 cm They are not divisible by 4

1.

Wednesday:

Mild:

Use a ruler to draw this shape and find its perimeter.
What do you notice about the missing side lengths?



The two unknown side lengths are equal to the side lengths opposite to them!

Mastery:

I can find the perimeter of rectilinear shapes that are not drawn on a square grid.

Greater Depth:

I can apply what I have learned about perimeter to investigate more complex problems.

$$7\text{cm} + 3\text{cm} + 4\text{cm} + 3\text{cm} + 10\text{cm} + 7\text{cm} = 34\text{cm}$$

The shape's perimeter is 34cm.

1.

1a. C

2a. 4cm

3a. True; when added together all the sides total 30cm.

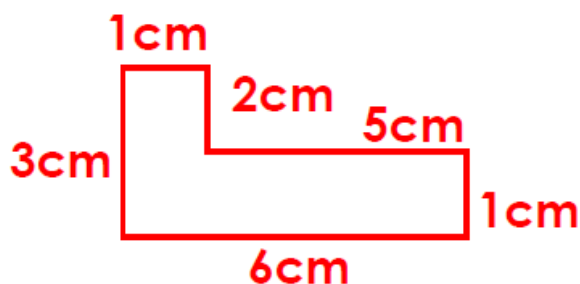
Medium:

5a. 2cm and 2cm; 24cm perimeter

6a. False; the perimeter is 28cm

7a. Shape A

8a. Any rectilinear shape with a perimeter of 18cm, for example:



Spicy:

7a. C

8a. Accept answers which total 32cm.

9a. False; the missing measurements are 5cm, 6cm, 15cm, 5cm, 5cm and 6cm, so the perimeter is 84cm.

48 cm, 36 cm or 120 cm as there are 12 sides and these numbers are all multiples of 12

Any other answers suggested are correct if they are a multiple of 12

54 cm

54 cm

Thursday:

Mild

1a. 18cm^2

2a. A

3a. 12cm^2

4a. False; $15\text{cm}^2 > 12\text{cm}^2$

Medium

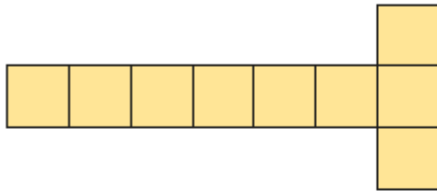
1. 8, 7 and 20
2. Purple = 5 Yellow = 2 Green = 4 Orange = 1

5a. 14cm^2

6a. A

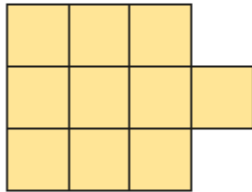
Count the squares in each shape to find the area.

A



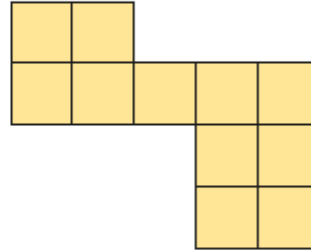
The area is squares.

B



The area is squares.

C



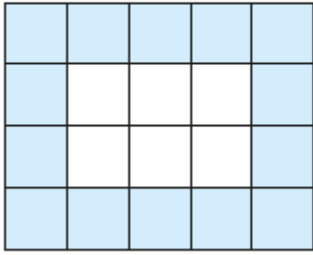
The area is squares.

Which shape has the greatest area? C

Spicy

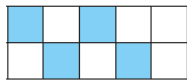
2

What is the area of the shaded part of the shape?

The area is 14 squares.

3

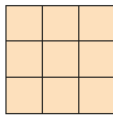
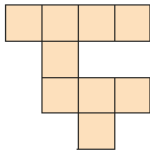
Here is a kitchen tile.



- a) What area of the tile is blue? 4 squares
- b) What area of the tile is white? 6 squares
- c) What is the total area of the tile? 10 squares

4

These two shapes are made up of squares of the same size.



Jack

These two shapes
have the same area.

Rosie

The first shape is bigger as it
takes up more space.Who is correct? Jack

Explain how you know.

They both have an area of 9 squares.

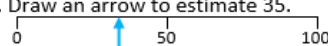
There were 20 squares. You know this because two sides of the rectangle are shown.

Smallest area – 15 squares.

Largest area – 30 squares.

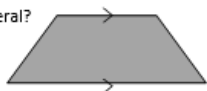
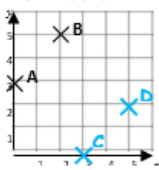
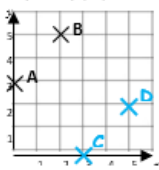
Friday

Mild

A: Place Value, Add and Subtract		
1. What is the missing number? 0 100 200 300 500	3:1 400	
2. What is the 9 worth in this number? 901	3:2 900 (hundreds)	
3. Put these in order, largest first. 716 176 617 761	3:3 761, 716, 617, 176	
4. Draw an arrow to estimate 35. 	3:4 Arrow	
5. Tom counts up in 50s starting from 100. What will his 4 th number be?	3:5 250	
6. 624 - 100 =	3:6 524	
7. 372 + 89 =	3:7 461	
8. Write a sum to check 46 + 19 = 65. Check: 65 19 46	3:9 -, =	
9. After spending 39p, Tom still has 43p left. How much did he start with?	3:8 82p	
10. What is the missing number? + 239 = 302	3:9 63	

B: Multiply, Divide and Fractions		
11. 48 ÷ 4 =	3:10 12	
12. 4 x 7 =	3:10 28	
13. Use 35 ÷ 7 = 5 to solve: 350 ÷ 70 =	3:11 5	
14. What is the missing number? 45 ÷ = 3 x 3	3:12 5	
15. What is the missing fraction? <u> </u>		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Geometry	
1. What is the missing number? 50 100 125 150	4.1 75	11. $72 \div 12 =$	4.9 6	21. Two apples are weighed. How much does 1 apple weigh? 	4.21 125g
2. What is the missing number? 54 63 72 90	4.1 81	12. Use $2 \times 4 \times 12 = 96$ to answer: 24×4	4.10 96	22. Draw the hands to show: 17:50 	4.22 Hands drawn
3. What is 1,000 less than 4,920?	4.2 3,920	13. $83 \times 7 =$	4.11 581	23. What is the name of this quadrilateral? 	4.23 Trapezium
4. Round this number to the nearest 1,000: 1,543	4.2 2,000	14. Shop A sells 6 pens for £3. Shop B sells 2 pens for 90p. Which is cheaper?	4.12 B	24. Plot the point (3, 0). Label it C. 	4.28 Point plotted
5. Put these numbers in order, smallest first: 3, -2, 0	4.3 -2, 0, 3	15. $\frac{1}{2} - \frac{\square}{4} - \frac{4}{\square}$	4.13 2, 8	25. Points A, B and C form 3 corners of a rectangle. Plot the fourth corner of the rectangle and label it D. 	4.28 Point plotted
6. Put these in order, smallest first: 3,293 1,273 2,837	4.4 1273, 2837, 3293	16. I have $\frac{1}{1}$ of a cake. How many pieces do I cut it into to make $\frac{1}{10}$?	4.14 10		
7. What number does this Roman Numeral represent? XIV	4.5 14	17. $\frac{1}{1} - \frac{9}{4}$	4.15 $\frac{2}{4}$		
8. $3,473 + 1,230 =$	4.6 4,703	18. Write $\frac{1}{10}$ as a decimal number.	4.16 0.01		
9. Write the sum to check $239 - 154 = 85$: $85 + \square = \square$	4.7 154, 239	19. What is the value of the 2 in: 1.72	4.17 $\frac{2}{100}$		
10. A 38cm tall plant grows 16cm a year. How tall will it be after 2 years?	4.8 70cm	20. Round 7.8 to the nearest whole number.	4.18 8		