



ANSWER SHEET



Arithmetic Quiz answers

Mild:

Question number	Question	Answer	Marks
1	$14 - 10 = \square$	4	1
2	$\square = 7 + 9 + 1$	17	1
3	$19 - \square = 4$	15	1
4	$165 + 3 = \square$	168	1
5	$\square \times 3 = 18$	6	1
6	$84 - \square = 22$	62	1
7	$\square = 245 + 50$	295	1
8	$\frac{1}{3}$ of 30 = $\square$	10	1
9	$48 + 28 = \square$	76	1
10	$6 \times 40 = \square$	240	1
11	$316 + 300 = \square$	616	1
12	$71 - 53 = \square$	18	1
13	$36 \div 4 = \square$	9	1
14	$\frac{7}{10} - \frac{4}{10} = \square$	$\frac{3}{10}$	1
15	$375 + 455 = \square$	830	1
16	$\square + 37 = 86$	49	1
17	$\square = \frac{3}{4}$ of 44	33	1
18	$47 \times 2 = \square$	94	1

Medium and Spicy:

Question number	Question	Answer	Marks
1	$\square = 2 \times 5 \times 2$	20	1
2	$14 \times 1 = \square$	14	1
3	$10 \times 0 = \square$	0	1
4	$\square + 16 = 42$	26	1
5	$120 \div 3 = \square$	40	1
6	$63 = \square \times 7$	9	1
7	$65 \div 1 = \square$	65	1
8	$\frac{9}{12} - \frac{2}{12} = \square$	$\frac{7}{12}$	1
9	$78 \div 3 = \square$	26	1
10	$\square = 54 \div 6$	9	1
11	$62 + 88 = \square$	150	1
12	$38 \times 4 = \square$	152	1
13	$660 \div 11 = \square$	60	1
14	$70 \times 7 = \square$	490	1
15	$\square \div 5 = 27$	135	1
16	$3409 + 4826 = \square$	8235	1
17	$248 \times 2 = \square$	496	1
18	$\square = \frac{3}{4}$ of 60	45	1
19	$624 - 245 = \square$	379	1
20	$\square \times 6 = 96$	16	1
21	$\frac{8}{9} + \frac{3}{9} = \square$	$\frac{11}{9}$ or $1\frac{2}{9}$	1
22	$269 \times 4 = \square$	1076	1
23	$84 \div \square = 6$	14	1
24	$4300 - 1628 = \square$	2672	1
25	$134 \times 6 = \square$	804	1

Monday - Identify Angles

Starter:

▲ A. $145 + 3 = 148$

■ B. $7894 - 4036 = 3858$

▲ C. $\frac{3}{4}$ of 12 = 9

■ D. $65 \times 3 = 195$

▲ E. $\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$

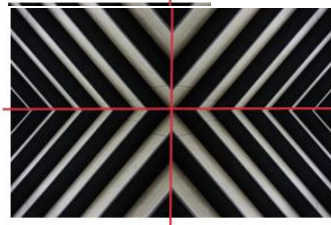
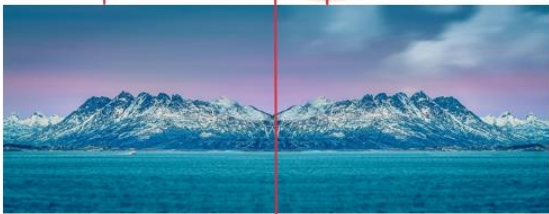
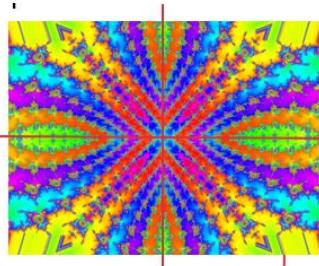
Mild

Draw four different quadrilaterals.



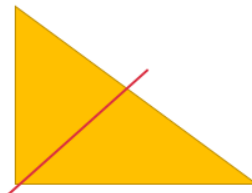
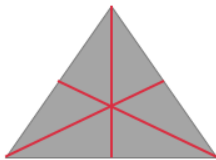
Plus other possibilities.

They are all symmetrical.

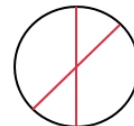


THIRD SPACE LEARNING

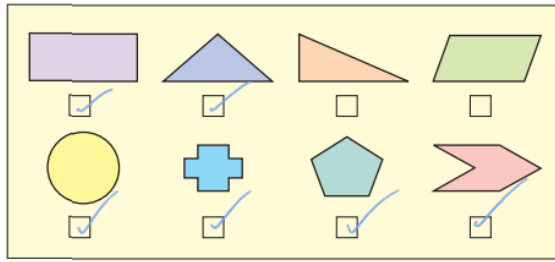
thirdspacelearning.com Specialist 1 to 1 maths interventions and support



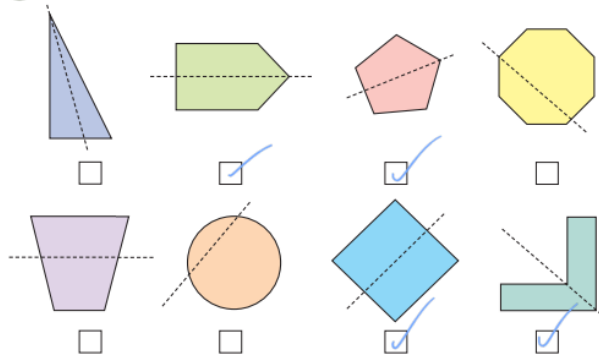
What about this shape? INFINITY



1 Tick the shapes that have at least one line of symmetry.



2 Tick the shapes that show a correct line of symmetry.

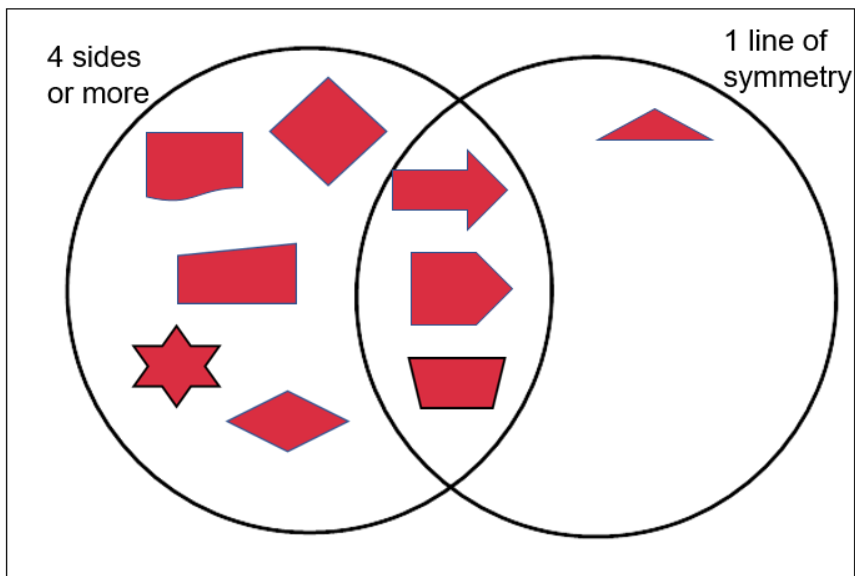


Medium

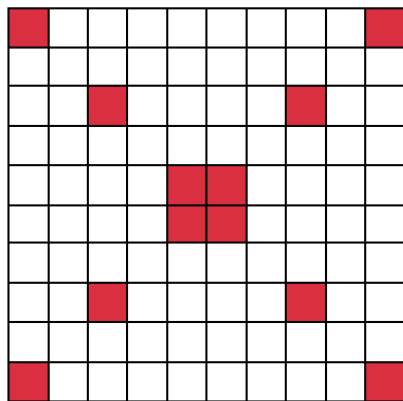
Sort these shapes according to how many lines of symmetry they have.

One line of symmetry or less	More than one line of symmetry

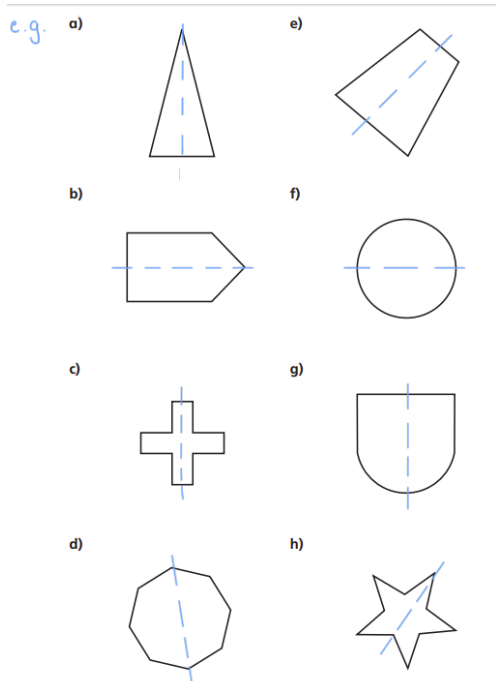
Put the shapes in the correct places on the venn diagram.



Can you draw a symmetrical pattern on the grid.



An example



Spicy:

	1 line of symmetry	More than 1 line of symmetry	No lines of symmetry
Triangle	C	D	E
Quadrilateral	H	G A B	F

- 5 Tommy is folding a paper circle to find lines of symmetry.



A circle has lots of lines of symmetry!

Do you agree with Tommy? yes

Talk about it with a partner.

Your responses will vary. Make sure you can explain where the line of symmetry goes!

6 Here are 3 logos.



All of these logos have lines of symmetry because they're circles.

Dora



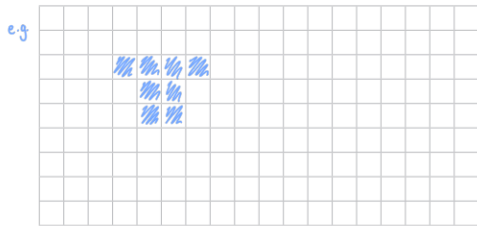
I disagree because the design on them isn't symmetrical.

Mo

Who do you agree with? Mo

Talk about it with a partner.

7 Shade a maximum of 8 squares to make a symmetrical shape.



Challenge:

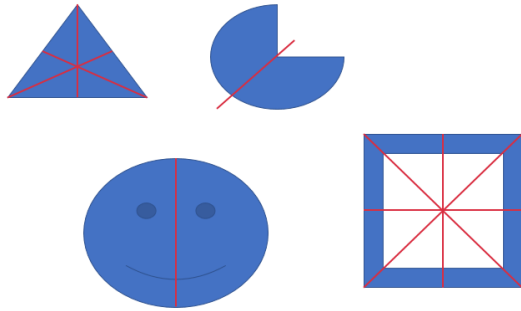
1. D
2. A
3. B

Tuesday - Line Symmetry Complete shape

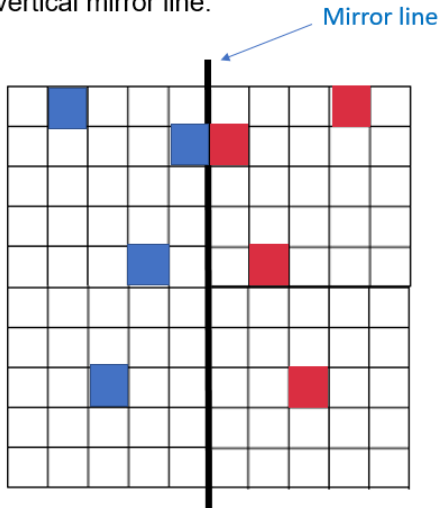
Starter:

 A. $6 \times 80 = 480$	 B. $18 \times 3 = 54$
 C. $80 \times 3 = 240$	 D. $981 + 4894 = 5875$
 E. $183 \times 100 = 18\ 300$	

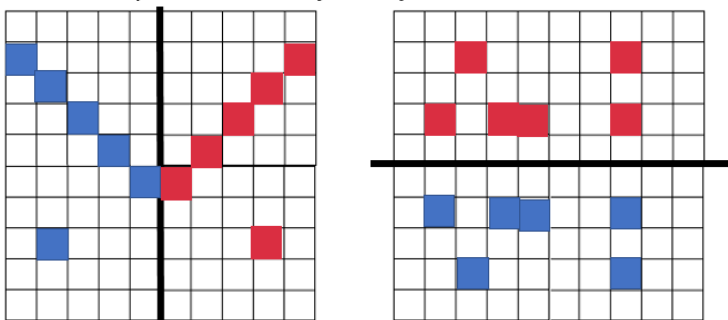
Mild:



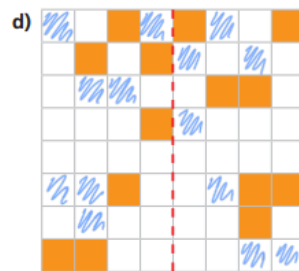
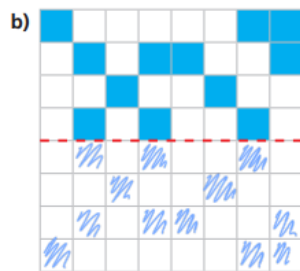
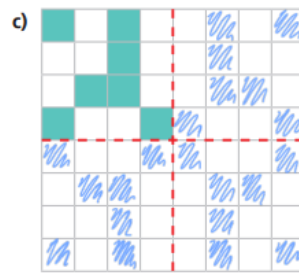
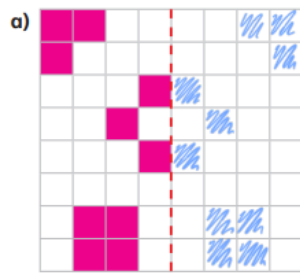
Finish the rest of the pattern on the grid to make it symmetrical in the vertical mirror line.



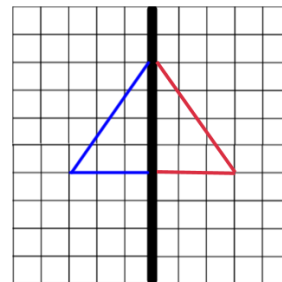
Finish the patterns so they are symmetrical in the mirror line(s)



Shade squares to make the patterns symmetrical.

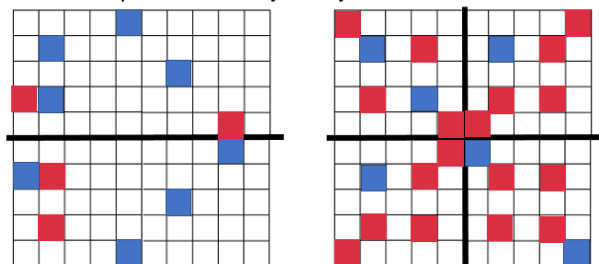


How would you complete this shape so that it is symmetrical?
 Draw the other half in the mirror line.
 What would you use to help you get it accurate? Pencil, ruler, mirror and counting squares.

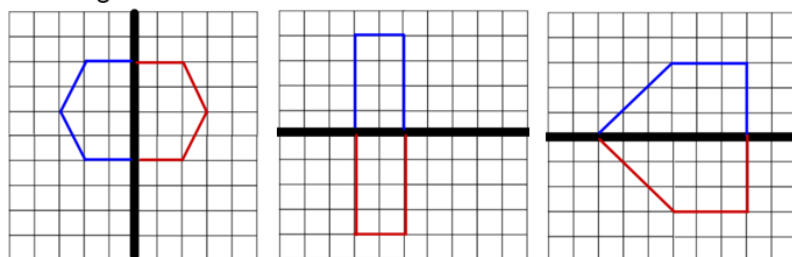


Medium:

Finish the patterns so they are symmetrical in the mirror line(s)



Complete and name the symmetrical shapes you have drawn on the grids.

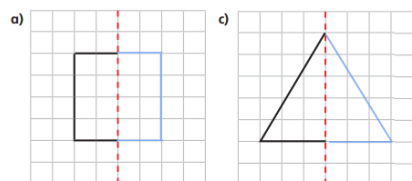


Hexagon

Rectangle

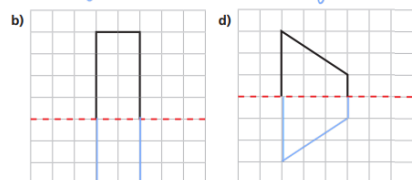
Pentagon

Complete the shapes according to the lines of symmetry.
Name each shape once you have drawn it.



square

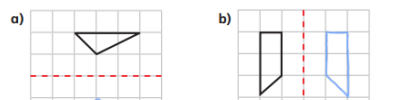
triangle



rectangle

trapezium

Reflect the shapes in the given mirror line.



Spicy:

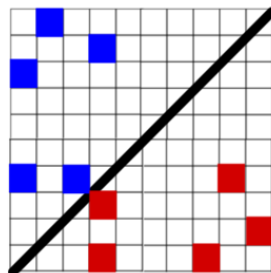
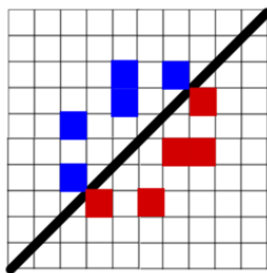
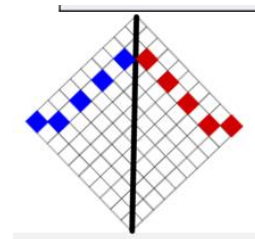
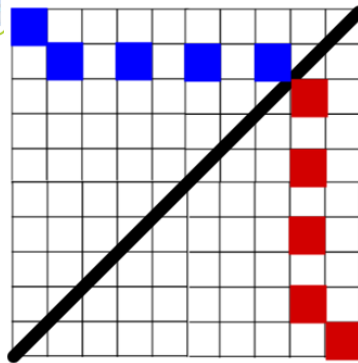
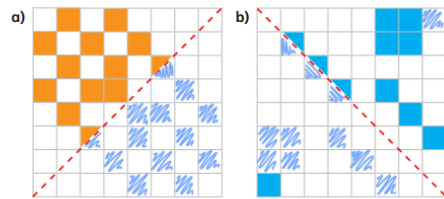


Each pattern is symmetrical around the mirror line.

Complete the patterns.



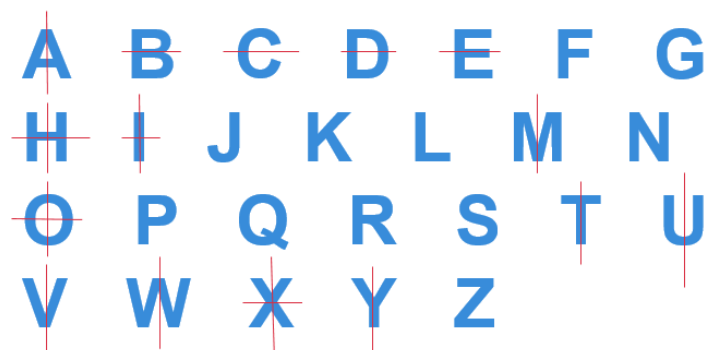
Shade squares to make the patterns symmetrical.



Evaluation:

EVALUATION:

Which letters have a line of symmetry?



Wednesday: Describing Position

Starter:

A. $92 \div 6 = 15 \text{ r } 2$

B. $69 \times 8 = 552$

C. $654 \times 10 = 6540$

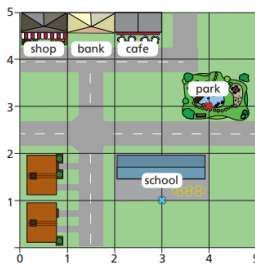
D. $87 - 29 = 58$

E. $98 + 65 = 163$

Mild:

Describe position

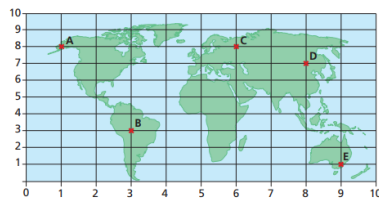
1 Here is a map of part of a town.



- a) Which place is next to the shop? bank
- b) Which place is next to the bank and close to the park? cafe
- c) The front gates of the school have been marked with a cross. Write the coordinates of the school gates. (3, 1)
- d) The slide in the park has been marked with a cross. Write the coordinates of the slide. (4, 3)

Compare answers with a partner.

2 A map of the world is drawn on a grid. Some locations are marked at points A to E.



- a) Which point is at the bottom right of the grid? E
- b) Which two points are to the left of point C on the map? A and B
- c) Write the coordinates of each location.
- A (1, 8) D (8, 7)
- B (3, 3) E (9, 1)
- C (6, 8)

- 1) clownfish = (5,5)
zebra shark = (2,1)
stingray = (1,7)

- octopus = (7,0)
turtle = (6,3)

- 2) lamp = (3,1)
compass = (2,5)
barrel = (10,2)

- seaweed = (9,3)
cannon ball = (7,7)
mirror = (5,2)



Medium:

- 1) a) (2,1) (3,2) (4,3) (5,4) (6,5) (7,6) (8,7) (9,8)
b) Answers will vary.

- 2) a) No. Kenneth hasn't realised that, as it starts at coordinate (1,1), the starfish will travel 7 squares right and 8 squares up to reach the coral.
b) Answers will vary.



1) a) (2,1) (3,2) (4,3) (5,4) (6,5) (7,6) (8,7) (9,8)

b) Answers will vary.



2) a) No. Kenneth hasn't realised that, as it starts at coordinate (1,1), the starfish will travel 7 squares right and 8 squares up to reach the coral.

b) Answers will vary.

Spicy:

1) a) Possible answers include (1,1), (2,2), (3,3).

b) Possible answers include (1,4), (2,8), (3,12).

c) Possible answers include (1,7), (2,8), (3,9), (7,1).

d) Possible answers include (5,5), (5,10), (10,5).

e) Possible answers include (1,2), (2,3), (3,4).

Accept any other correct answers that children give.



Thursday: Co-ordinates in first quadrant

Starter:



A. $75 \div 6 = 12 \text{ r } 3$



B. $604 - 100 = 504$



C. $439 + 7842 = 8281$



D. $654 + 230 = 884$



E. $56 \div 8 = 7$

Mild

1) Points drawn at (5,2) and (5,5).

2) Points drawn at (1,5) and (5,3).

3) Multiple answers possible, including (3,4) and (5,2) or (1,1) and (3,5).

4) Multiple answers possible, including (3,4) and (5,4).

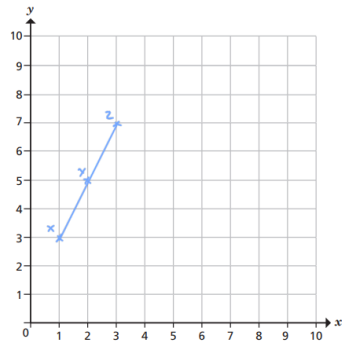
2. Here are the coordinates of three points.

X (1, 3)

Y (2, 5)

Z (3, 7)

- a) Plot and label the points on the grid.



- b) Join up the points.

What do you notice?

- c) Write the coordinates of two other points that fit this pattern.

e.g. (0, 1) and (4, 9)

3. The cards show the coordinates of six points.

A (4, 4)

B (2, 3)

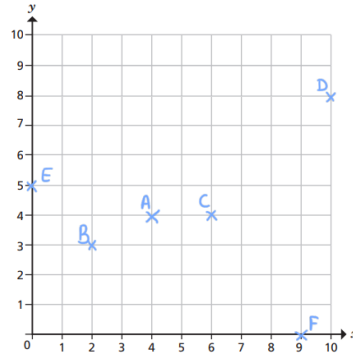
C (6, 4)

D (10, 8)

E (0, 5)

F (9, 0)

Plot and label the points on the grid.



Compare answers with a partner.

Medium

3. Here are the coordinates of the vertices of a rectangle.

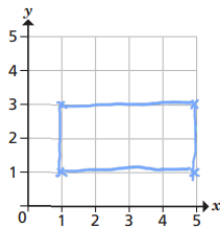
(1, 1)

(5, 1)

(1, 3)

(5, 3)

Draw the rectangle on the grid.



4. Two squares are drawn on a grid.

Here are the coordinates of the vertices of each square.

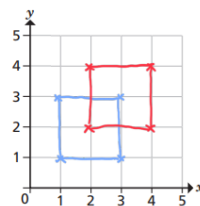
Square A (1, 1) (1, 3) (3, 3) (3, 1)

Square B (2, 2) (2, 4) (4, 4) (4, 2)

- a) Do you think the squares will overlap?

Yes

- b) Draw on the grid to check your answer.

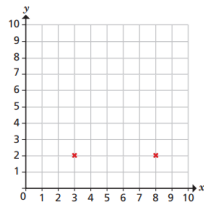


An explanation and examples that show that the five points could make a pentagon, but that they could be in a straight line to create a line in a triangle or quadrilateral.



Spicy

- 5 Two vertices of a triangle are shown on the grid.



- a) What are the coordinates of the two vertices shown?

(3, 2) and (8, 2)

- b) Give a possible coordinate for the third vertex, if the triangle is right-angled.

e.g. (3, 10)

- c) Give a possible coordinate for the third vertex, if the triangle is isosceles.

e.g. (8, 7)

Compare answers with a partner.

- 6 The coordinates of one vertex of a square are (10, 10).

Give possible coordinates for the other three vertices.

e.g. (0, 0) (0, 10) (10, 0)

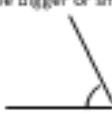
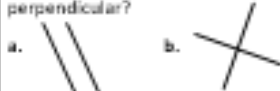
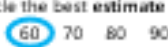
How many different answers can you find?

Multiple answers are possible – make sure children have drawn different triangles/quadrilaterals, and that they have given the correct coordinates for each shape.

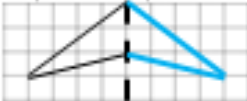


Friday

Mild

A: Place Value, Add and Subtract	B: Multiply, Divide and Fractions	C: Measure and Geometry
1. What is 10 less than this number? 106 96	11. $64 \div 8 =$ 8	23. How many grams are there in 2 and a half kilograms? 2500
2. What is the 6 worth in this number? 962 60 (6 tens)	12. $6 \times 4 =$ 24	22. What is the perimeter of this square?  16cm
3. Write < or > to make this correct: 245 254 <	13. $32 \times 2 =$ 64	23. Ian turns through half a turn. How many degrees has he turned through?  180
4. Show 8°C on the thermometer.  Line or arrow	14. There are 3 girls for every 2 boys. If there are 10 boys, how many girls? 15	24. Is this angle bigger or smaller than a right angle?  Smaller
5. Make the largest number possible using the digits 6 3 and 8. 863	15. What is one tenth of 12? 1.2	25. Which pair of lines are perpendicular?  b
6. $299 + 1 =$ 300	16. Circle $\frac{5}{10}$ of the marbles.  5	
7. $389 - 237 =$ 152	17. What is $\frac{2}{5}$ of 25? 10	
8. Circle the best estimate to $119 - 58$:  60	18. $\frac{4}{10} - \frac{2}{10}$  1	
9. A school has 700 tickets to sell for a play. They sell 537. How many left? 163	19. Add the fractions. $\frac{2}{7} + \frac{4}{7}$ $\frac{6}{7}$	
10. What is the missing number? $33 + \square - 24 = 27$ 18	20. Write the largest fraction. $\frac{4}{10}, \frac{4}{10}, \frac{4}{10}, \frac{4}{10}$ $\frac{1}{2}$	

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics																
1. What is the missing number? 1,000 2,000 3,000 5,000	^{E1} 4,000	11. $12 \times 6 =$	^{E8} 72	21. How many centimetres are there in 4.25 metres?	^{E18} 425															
2. What is the missing number? 200 250 275 300	^{E1} 225	12. Complete the sum that is equal to $2 \times 3 \times 12$: $12 \times$	^{E18} 6	22. Tick (✓) the shape that has more than one line of symmetry.	^{E18} Rectangle															
3. Round this number to the nearest 1,000: 5,731	^{E3} 6,000	13. $429 \times 3 =$	^{E17} 1,287	☒   																
4. What is 1,000 more than 2,960?	^{E2} 3,960	14. To work out 62×7 you could do: $60 \times$ $+$ $\times 7$	^{E17} 7, 2	23. Complete this shape:	^{E18} Shape drawn															
5. If the temperature starts at 4°C , then drops by 12°C , what is it now?	^{E1} -8°C	15. $\begin{array}{r} 2 \\ - \\ \hline \end{array} \quad \begin{array}{r} 5 \\ - \\ \hline \end{array}$	^{E13} 25																	
6. What is the value of the 9 in this number? 3,296	^{E4} 90	16. What is the missing number? 4.00 4.01 4.02 4.03	^{E18} 4.04	24. This table shows how teachers and students own different pets:																
7. Write the number 38 in Roman numerals.	^{E8} XXXVIII	17. $\begin{array}{r} 8 \\ - \\ \hline \end{array} \quad \begin{array}{r} 5 \\ - \\ \hline \end{array}$	^{E18} $\frac{13}{11}$	<table data-bbox="1083 826 1393 927"><tr><th></th><th>Dog</th><th>Cat</th><th>Rabbit</th><th>Mouse</th></tr><tr><td>Teacher</td><td>13</td><td>19</td><td>9</td><td>5</td></tr><tr><td>Student</td><td>28</td><td>23</td><td>16</td><td>8</td></tr></table>		Dog	Cat	Rabbit	Mouse	Teacher	13	19	9	5	Student	28	23	16	8	^{E18} 23
	Dog	Cat	Rabbit	Mouse																
Teacher	13	19	9	5																
Student	28	23	16	8																
8. $3,629 + 5,318 =$	^{E8} 8,947	18. Write 0.75 as a fraction.	^{E18} $\frac{3}{4}$	How many students have cats?																
9. Estimate the answer to: $15,982 \approx 8,025$	^{E7} 8,000	19. $123 \div 100 =$	^{E17} 1.23	25. Which pet is the most popular?	^{E18} Cat															
10. From 750 tickets, pupils buy 205 & parents buy 478. How many are left?	^{E8} 67	20. Using £20 Rob buys a top for £8.90 and a scarf for £5.50. How much left?	^{E18} £5.60																	