

ISEB Assessments Year 4 Maths Test 2

Author: David E Hanson



This test contains a selected set of 10 questions in a particular topic order.

- 100 marks are available in total.
- You should take no more than 1 hour to complete the test.
- Write your answers in the spaces provided.
- Always write down your working, except when you are told not to.
- Calculators are not allowed.

SAMPLE

NOTE TO TEACHERS

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Year 4 Maths Test 2

1. (a) What is the value of the digit 4 in 2437?

Answer: (1)

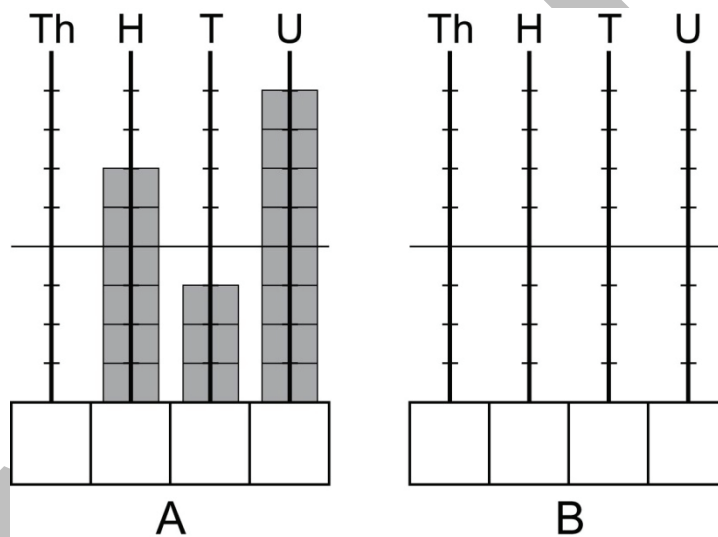
(b) Write these numbers in order of increasing size.

9380 893 9803 8930 938

Answer: , , , , (2)

(c) The diagram shows 2 abacuses, A and B.

(i) What number is represented on abacus A? Write it in the boxes provided.



(1)

(ii) On abacus B, show the number that you would get if you added 585 to the number shown on abacus A.

(2)

(d) (i) The number 4809 can be written as $4000 + 800 + 9$
Write the number 7084 in the same way.

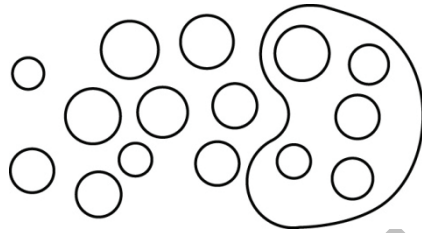
Answer: (2)

(ii) A number can be written as $10\ 000 + 400 + 10$

Write this number in figures.

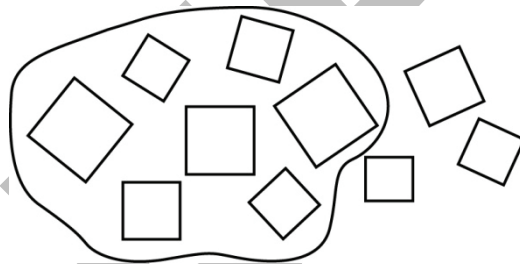
Answer: (2)

2. (a) (i) What fraction of this group of circles is inside the loop?



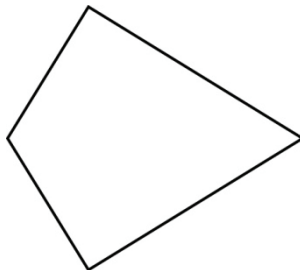
Answer: (1)

(ii) What fraction of this group of squares is inside the loop?



Answer: (2)

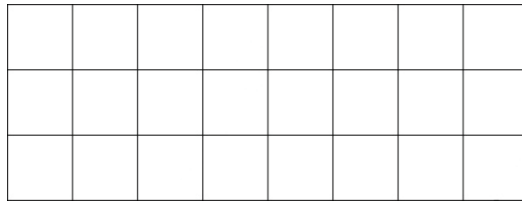
(b) (i) Shade a half of this shape.



(1)

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(ii) Shade $\frac{3}{8}$ of this rectangle.



(2)

(c) Fill in the gaps.

(i) One third + is one whole. (1)

(ii) $\frac{3}{8}$ + is one whole (2)

(iii) is $\frac{4}{5}$ of 20 (1)

3. Complete these calculations.

(a) (i) $(5 + 3) + 2 =$ (1)

(ii) $5 + (3 + 2) =$ (1)

(b) (i) $(5 + 3) - 2 =$ (1)

(ii) $5 + (3 - 2) =$ (1)

(c) (i) $(5 - 3) + 2 =$ (1)

(ii) $5 - (3 + 2) =$ (1)

(d) (i) $(5 - 3) - 2 =$ (2)

(ii) $5 - (3 - 2) =$ (2)

4. (a) (i) In which multiplication table do all of these numbers appear?

6 15 18 27 30

Answer: times table (1)

(ii) In which multiplication table do all of these numbers appear?

8 16 24 36 40

Answer: times table (2)

(iii) In which multiplication table do all of these numbers appear?

14 28 42 56 63

Answer: times table (2)

(b) Apart from itself and 1, the number 30 is a **multiple** of 2 and 3 and 5 and 6 and 15

Fill in these gaps **using 2, 3, 4, 5 and 7**

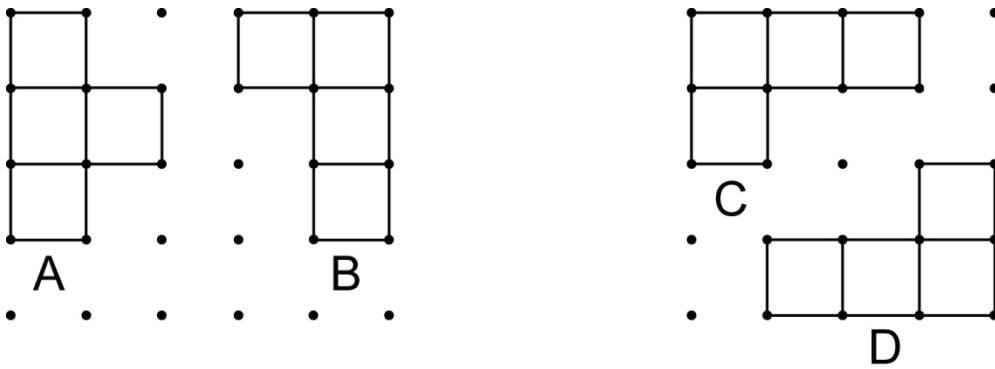
(i) 12 is a multiple of and and and 6 (1)

(ii) 35 is a multiple of and (2)

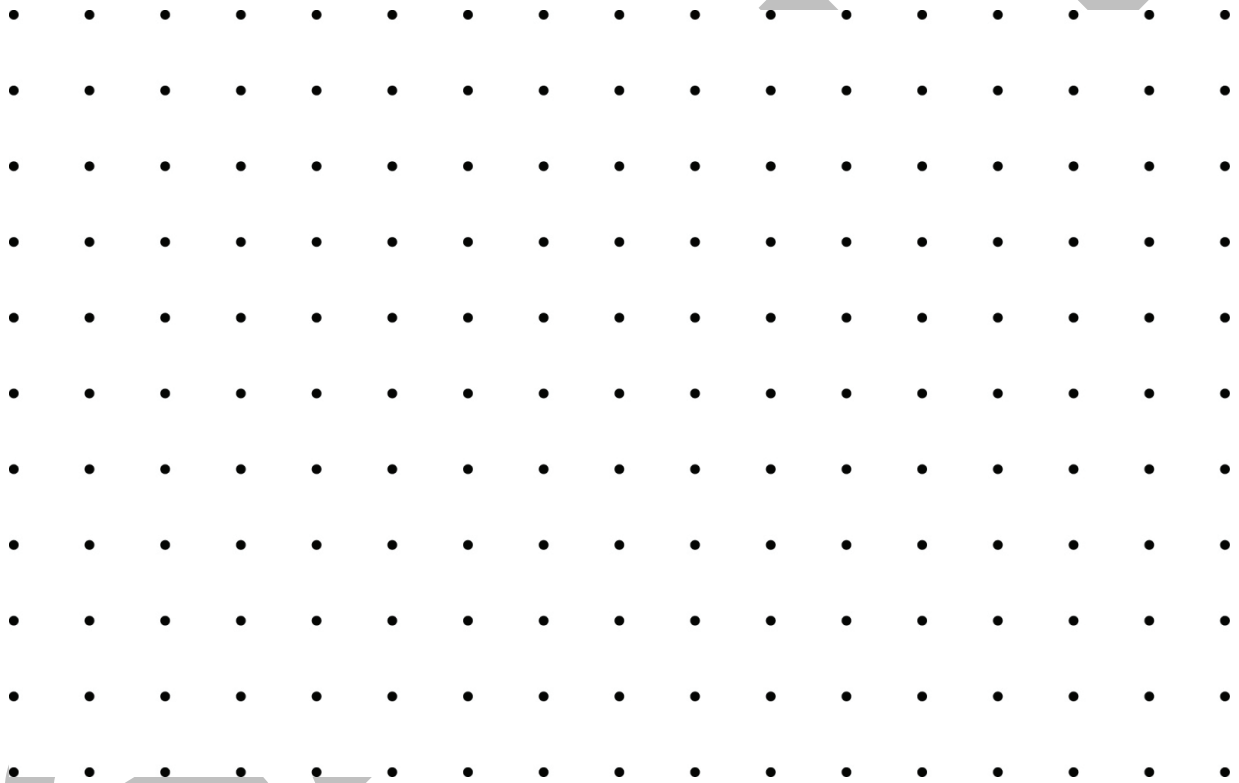
(iii) 28 is a multiple of and and and 14 (2)

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5. (a) Draw the different shapes that could be made by joining together 4 centimetre squares side to side.

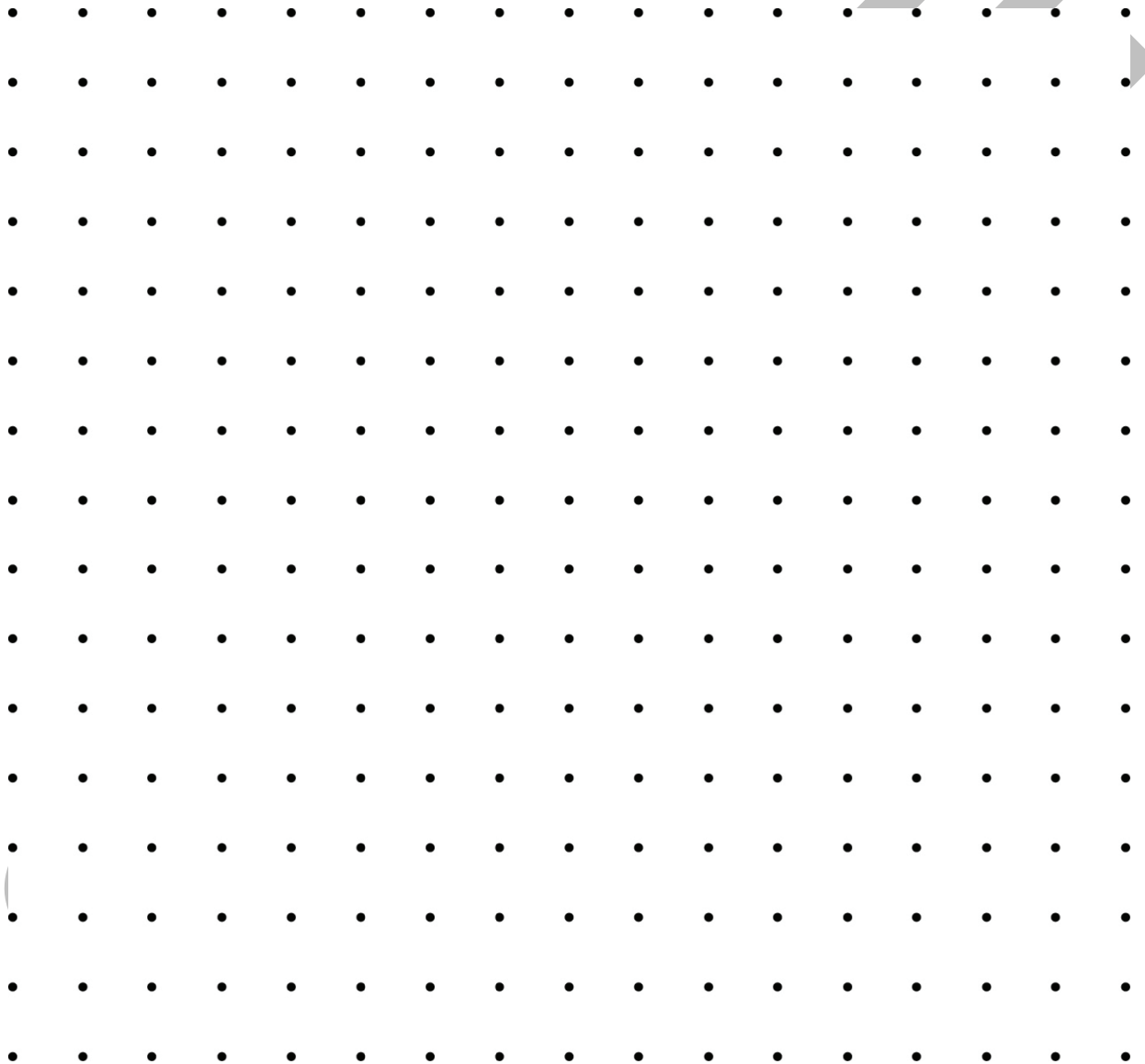
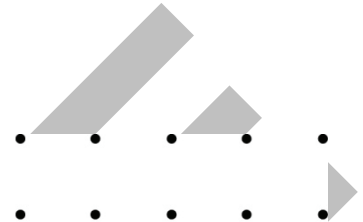
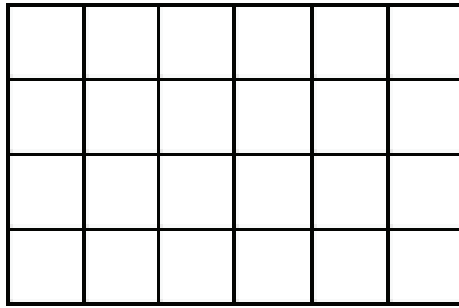


Two examples A and B are done for you. Note that C and D are the same as shape B, rotated.



(5)

- (b) Draw all the different ways that the bar of chocolate shown below could be shared exactly (without leaving any pieces) by groups of children.



(5)

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6. (a) In each part of this question, circle the odd one out and explain why it is the odd one out.

- (i) 29 13 11 23 35

Answer:

.....
..... (2)

- (ii) 21 35 14 27 42

Answer:

.....
..... (2)

- (iii) 4 16 45 9 36

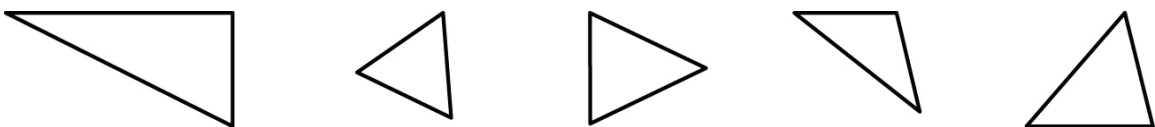
Answer:

.....
..... (2)

(b) In the row of triangles below:

(i) draw a circle around the right-angled triangle (1)

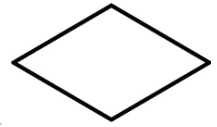
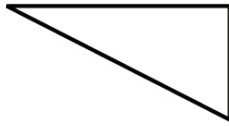
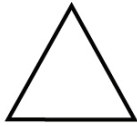
(ii) shade the triangle whose angles are all equal. (1)



(c) In the row of shapes below:

(i) draw a circle around the shape with no symmetry (1)

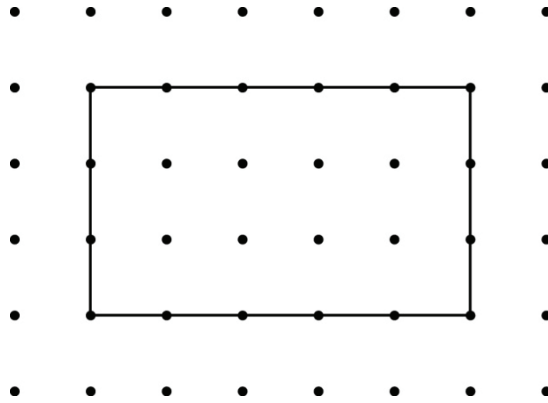
(ii) shade the shape which has line symmetry but no rotational symmetry. (1)



Turn over to the next page for question 7

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7. (a) The rectangle below has been drawn on a centimetre square dotted grid.



Use the grid to help you to find:

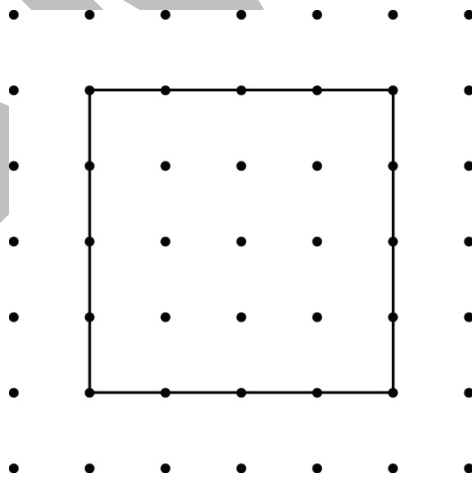
(i) the perimeter of the rectangle

Answer: centimetres (1)

(ii) the area of the rectangle.

Answer: square centimetres (2)

(b) The square below has been drawn on a centimetre square dotted grid.



Use the grid to help you to find

(i) the perimeter of the square.

Answer: centimetres (1)

(ii) the area of the square.

Answer: square centimetres (2)

(c) On the centimetre square grid below, draw a rectangle which has a perimeter of 12 cm and an area of 8 cm^2 .

(4)

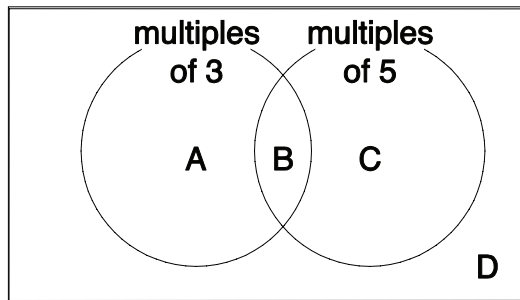
Turn over to the next page for question 8

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8. (i) The regions of the Venn diagram below have been labelled A, B, C and D.

The numbers 10 to 30 are to be written in the correct regions.



Considering only the numbers 10 to 30:

(a) list all the numbers in region B

Answer: (3)

(b) give 2 numbers in region A

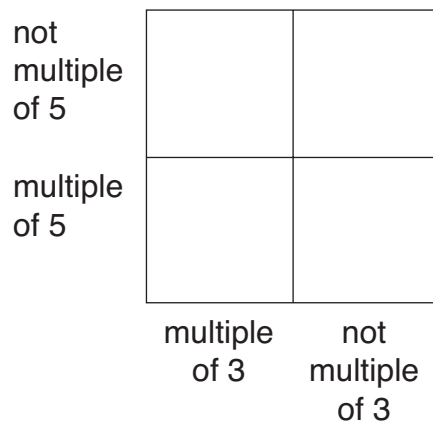
Answer: and (2)

(c) give 2 numbers in region D.

Answer: and (2)

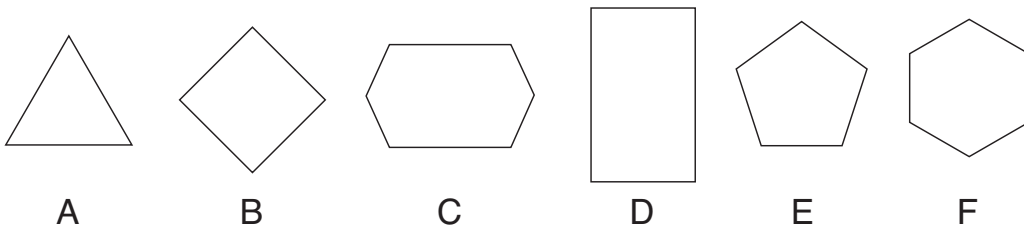
(ii) The Carroll diagram below represents the same information.

Label the corresponding regions A, B, C and D.



(3)

9. (a) Look at these shapes.



(i) What makes shapes C and D different from all the others?

Answer:

..... (1)

(ii) What do shapes C and F have in common?

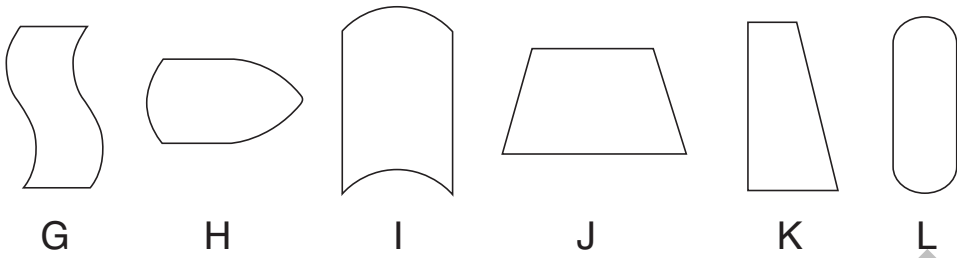
Answer:

..... (1)

Turn over to the next page for question 9 (b).

SAMPLE

(b) Look at these shapes.



(i) What do shapes G and L have in common?

Answer:
..... (1)

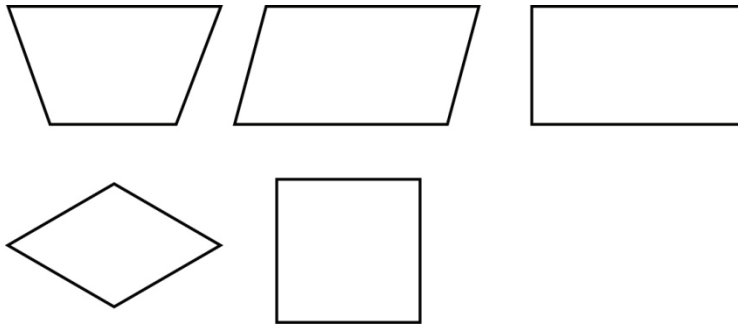
(ii) What do shapes G and K have in common?

Answer:
..... (1)

(iii) What makes shape K different from the all the others?

Answer:
..... (1)

(c) (i) Draw a shape which would fit into the group below.



(2)

(ii) Why does your shape fit into this group?

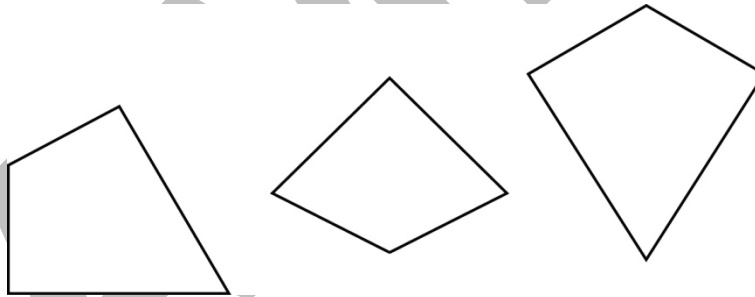
Answer:

.....

.....

(1)

(d) What do the members of this group all have in common?



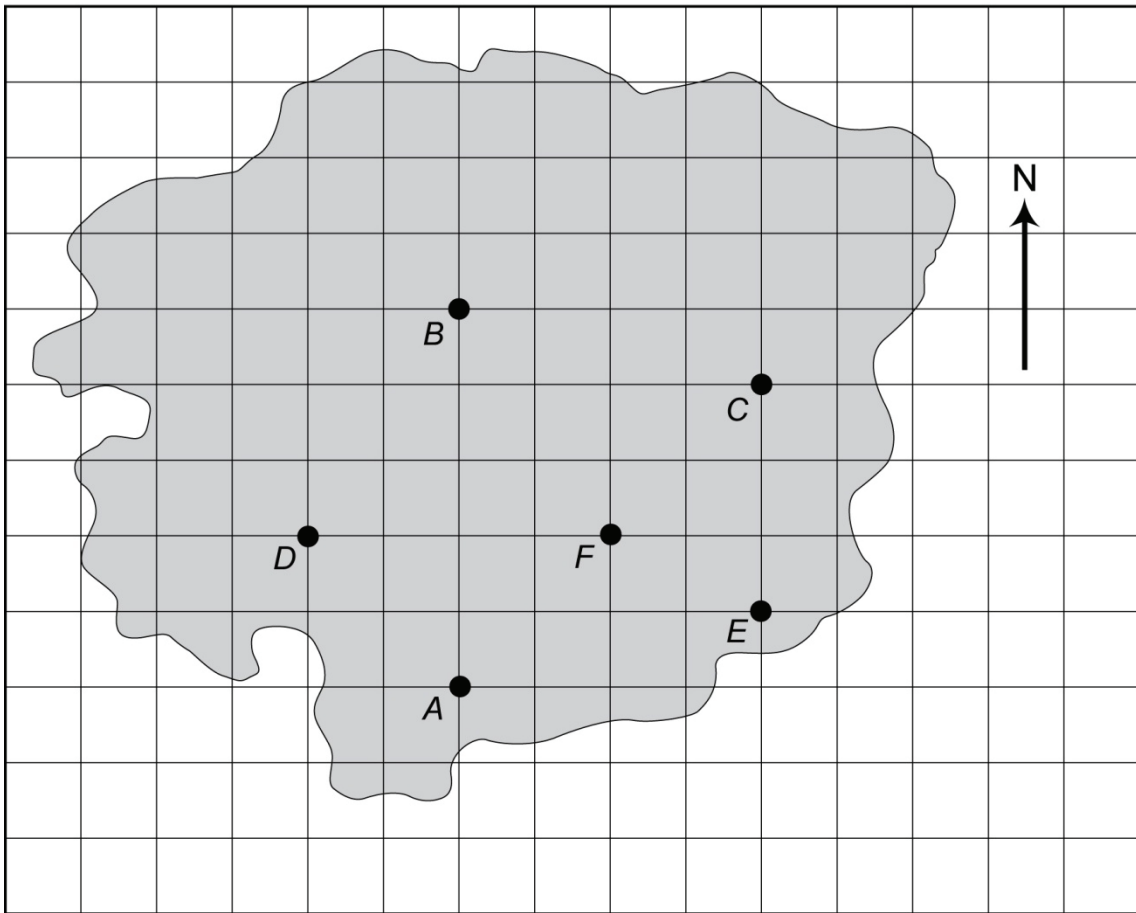
Answer:

.....

.....

(2)

10. The drawing below shows the map of an island.



(i) In which direction would you walk to get from

(a) A to B

Answer: (1)

(b) C to E

Answer: (1)

(c) A to F

Answer: (1)

(d) B to E

Answer: (1)

(e) C to F?

Answer: (1)

(ii) Mark and label

(a) the point G which is on the coast, east of B. (2)

(b) the point H which is north of D and north-west of B. (3)

SAMPLE

ISEB Assessments Year 4 Maths Test 2 Answers

Author: David E Hanson



This document consists of a full set of answers to the questions in Year 4 Maths Test 2.

Total marks: 100

These answers are part of *Year 4 Maths Test 2.zip*, which also contains:

Year 4 Maths Test 2.pdf

(the test)

Year 4 Maths Test 2 Teacher's Document.pdf

(the teacher's document)

REQUIRED PRINT SETTINGS

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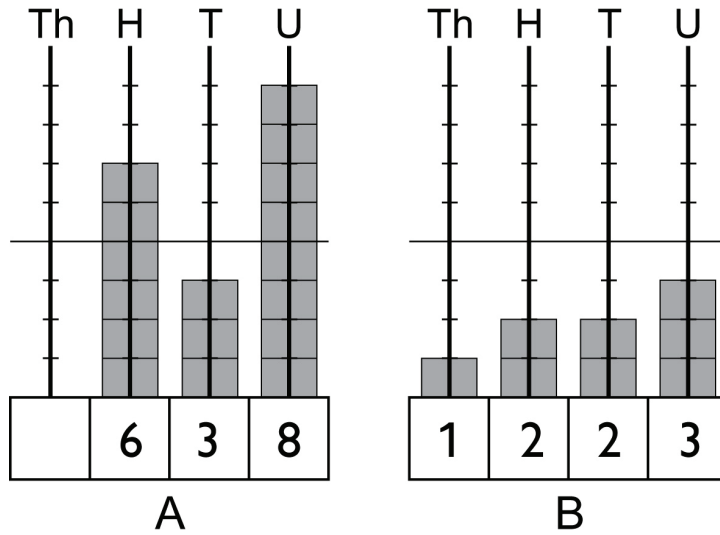
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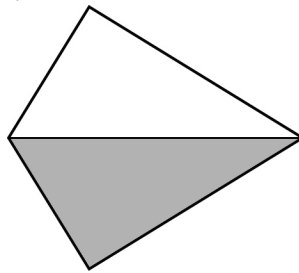
Year 4 Maths Test 2 Answers

1. (a) 400 (four hundreds) (1)
 (b) 893, 938, 8930, 9380, 9803 (2)
 (c)



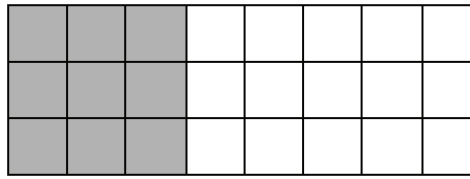
- (i) 638 (1)
 (ii) 1223 shown on abacus B. (2)
 (d) (i) $7000 + 80 + 4$ (2)
 (ii) 10 410 (2)

2. (a) (i) $\frac{1}{3} \left(\frac{5}{15}\right)$ (1)
 (ii) $\frac{7}{10}$ (2)
 (b) (i)



(1)

(ii) Answers may vary. For example:



(2)

(c) (i) One third + two thirds is one whole. (1)

(ii) $\frac{5}{8}$ (2)

(iii) 16 (1)

3. (a) (i) $(5 + 3) + 2 = 10$ (1)
 (ii) $5 + (3 + 2) = 10$ (1)

(b) (i) $(5 + 3) - 2 = 6$ (1)
 (ii) $5 + (3 - 2) = 6$ (1)

(c) (i) $(5 - 3) + 2 = 4$ (1)
 (ii) $5 - (3 + 2) = 0$ (1)

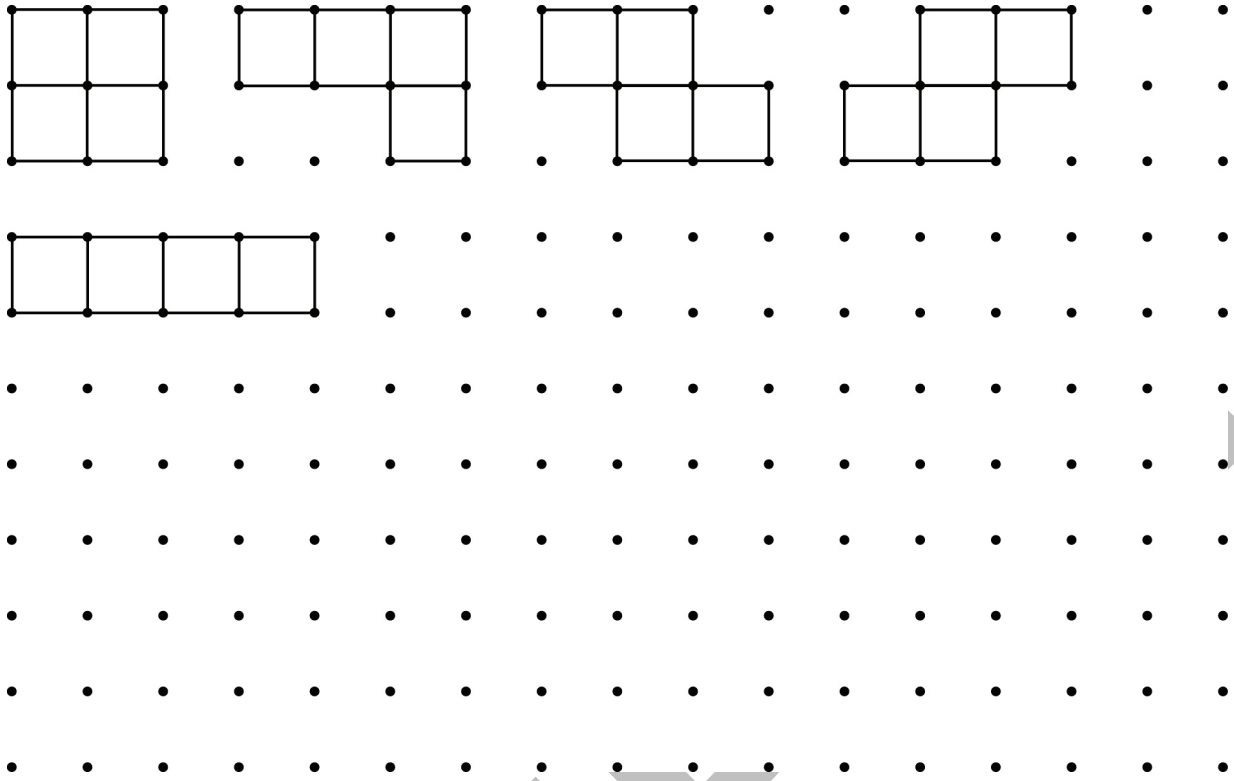
(d) (i) $(5 - 3) - 2 = 0$ (2)
 (ii) $5 - (3 - 2) = 4$ (2)

4. (a) (i) 3 times table (1)
 (ii) 4 times table (2)
 (iii) 7 times table (2)

(b) (i) 12 is a multiple of 2 and 3 and 4 and 6 (1)
 (ii) 35 is a multiple of 5 and 7 (2)
 (iii) 28 is a multiple of 2 and 4 and 7 and 14 (2)

Year 4 Maths Test 2 Answers

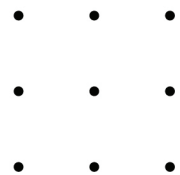
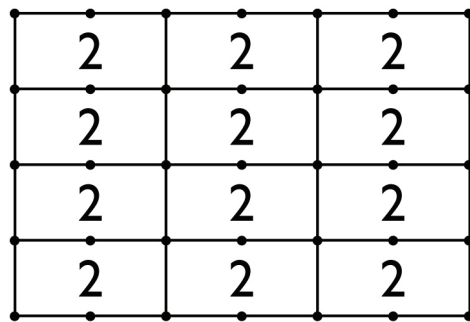
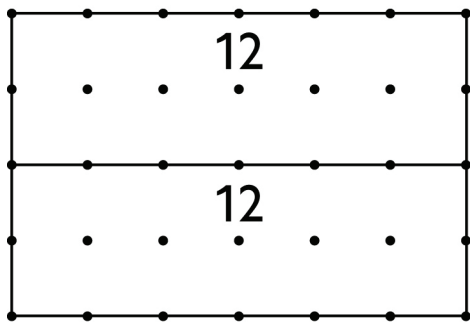
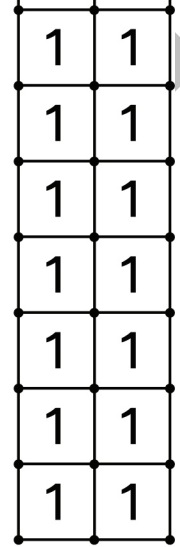
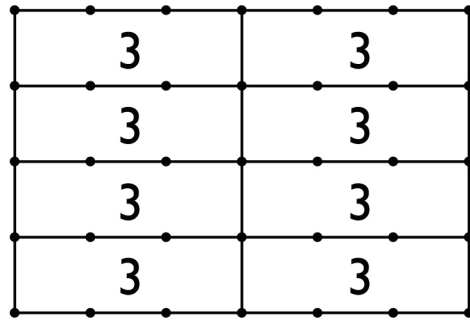
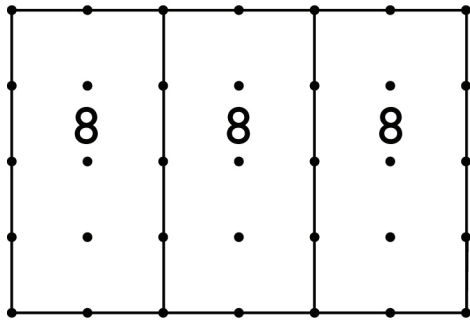
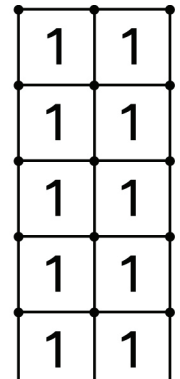
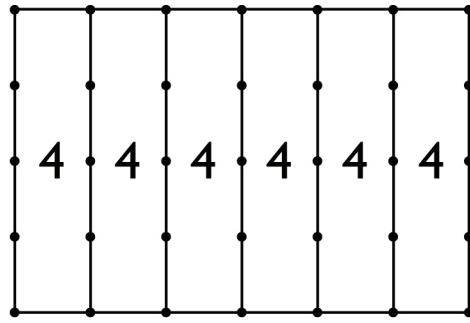
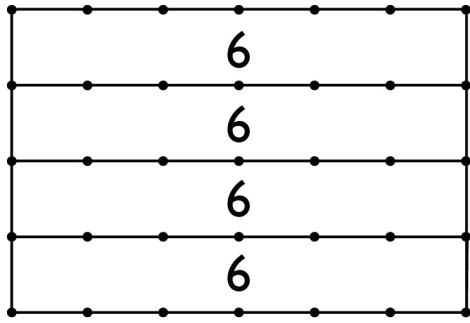
5. (a)



(5)

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(b) Answers may vary. For example:

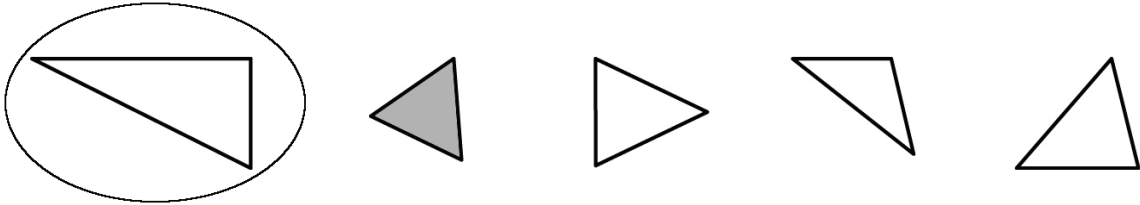


(5)

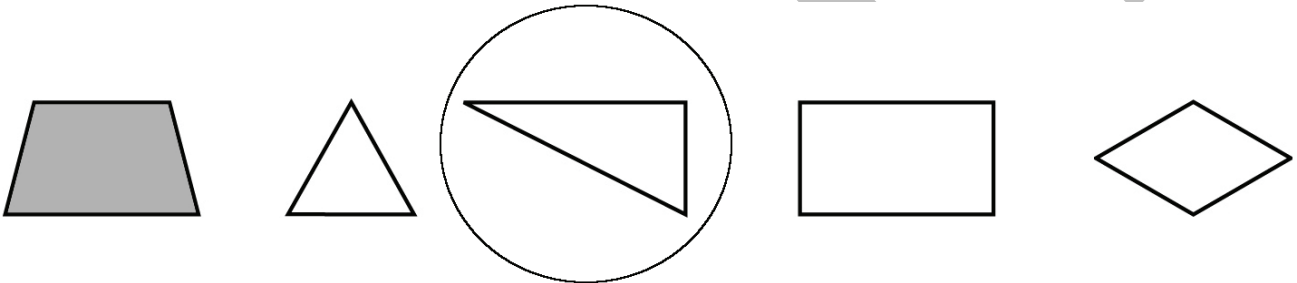


Year 4 Maths Test 2 Answers

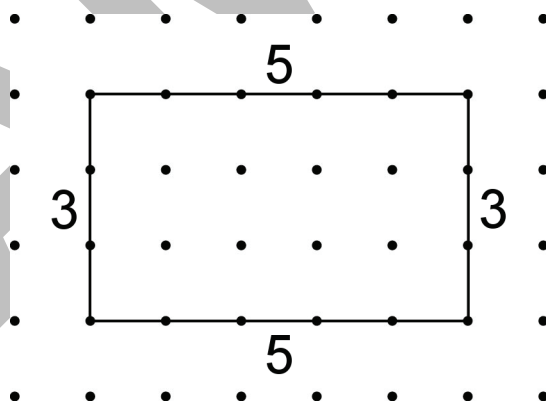
6. (a) (i) 35, because it is not prime (5×7) and all the others are. (2)
 (ii) 27, because it is not a multiple of 7 and all the others are. (2)
 (iii) 45, because it is not a square number and all the others are. (2)
- (b) (i) Circle drawn around the right-angled triangle. (1)
 (ii) Triangle whose angles are all equal shaded. (1)



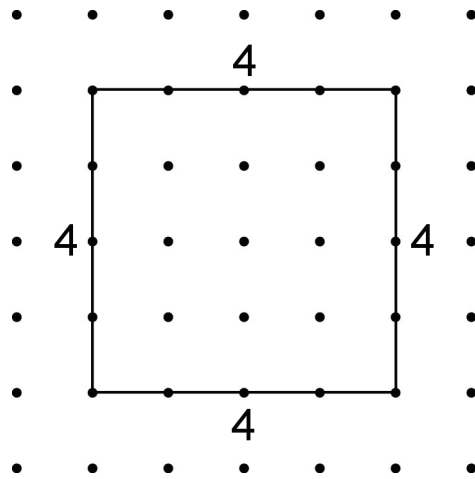
- (c) (i) Circle drawn around the shape with no symmetry. (1)
 (ii) Shape which has line symmetry but no rotational symmetry shaded. (1)



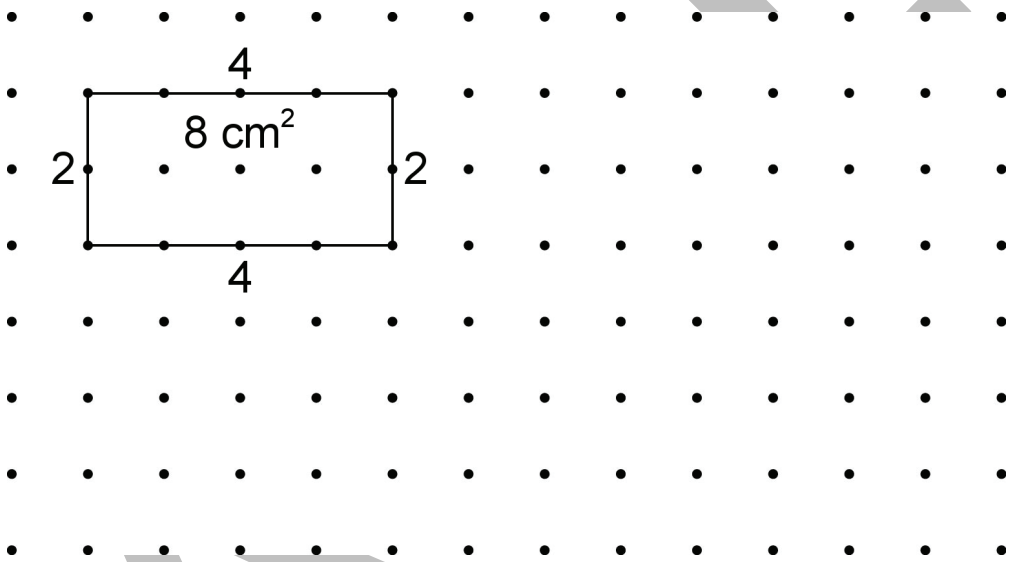
7. (a) (i) 16 centimetres (1)
 (ii) 15 square centimetres (2)



- (b) (i) 16 centimetres (1)
 (ii) 16 square centimetres (2)



(c)



(4)

8. (i) (a) 15, 30 (3)
 (b) Answers may vary.
 For example: 12, 18, 21, 24, 27 (2)
 (c) Answers may vary.
 For example: 13, 14, 16, 17, 19, 22, 23, 26, 28, 29 (2)

Year 4 Maths Test 2 Answers

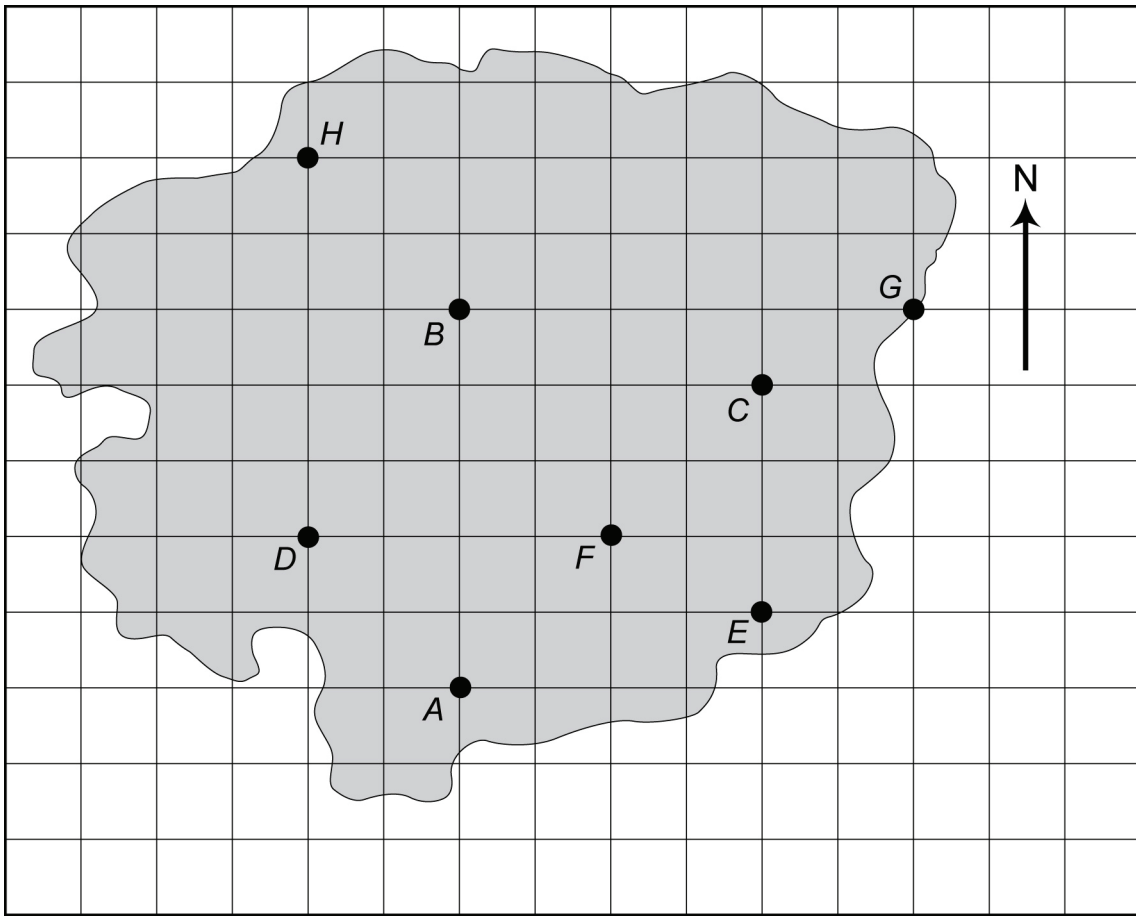
(ii)

not multiple of 5	A	D
multiple of 5	B	C
	multiple of 3	not multiple of 3

(3)

9. (a) (i) Shapes C and D both have sides of different lengths. All the other shapes are regular. (1)
- (ii) Shapes C and F are both hexagons. (1)
- (b) (i) Shapes G and L both have rotational symmetry. (1)
- (ii) Shapes G and K both have no line symmetry. (1)
- (iii) Shape K has no symmetry of any kind. All the other shapes are symmetrical in at least one way. (1)
- (c) (i) Any quadrilateral drawn. (2)
- (ii) It has 4 sides. (1)
- (d) There are two possible answers:
They are all kites or they all have one line of symmetry. (2)
10. (i) (a) North (1)
- (b) South (1)
- (c) North-east (1)
- (d) South-east (1)
- (e) South-west (1)

(ii)



(a) G marked on map.

(2)

(b) H marked on map.

(3)

ISEB Assessments

Year 4 Maths Test 2

Teacher's Document



This test contains a selected set of 10 questions aimed at Year 4 pupils.
The questions are arranged in a particular topic order as follows:

Topic	Question
Number	1
	2
Calculations	3
	4
Problems (including Handling Data)	5
	6
	7
	8
Shape, Space and Measures	9
	10

Total marks: 100

Total time allocated: 1 hour

Calculators are not allowed.

Teachers should feel free to use this resource in whatever way is most appropriate for their scheme of work. The test can be attempted all at once and is designed to take a Year 4 pupil approximately one hour to complete.

Some questions require pupils to explain their answers. If you feel that this is too demanding, pupils can be instructed to explain themselves orally to you or to the rest of the class in a discussion.

Please refer to the printing instructions provided on the next page of this teacher's document before printing copies of the test or the accompanying answers.

This teacher's document is part of *Year 4 Maths Test 2.zip*, which also contains:

Year 4 Maths Test 2.pdf (the test)
Year 4 Maths Test 2 Answers.pdf (the answers)

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