

ENTRY LEVEL CERTIFICATE MATHEMATICS

5930/3

Externally set assignment
Component 3 – Ratio

Specimen 2015

Time allowed: 45 minutes

Materials

For this paper you must have:

- a pen
- a pencil
- a ruler

You may use a calculator.

20 counters should be made available for each candidate.



Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the bottom of this page.
- Answer **all** questions.
- You must answer the questions in the space provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work that you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 30
- You are expected to use a calculator where appropriate.

Advice

- In all calculations, show clearly how you worked out your answer.

Please write clearly, in block capitals.

Centre number

Candidate number

Surname

Forename(s)

Candidate signature _____

Answer **all** questions in the spaces provided.

1 Fill in the missing numbers.

1 (a) $4 + 5 = 3 + \square$

[1 mark]

1 (b) $14 + 4 = 11 + \square$

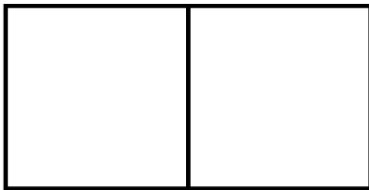
[1 mark]

1 (c) $9 - 3 = 18 - \square$

[1 mark]

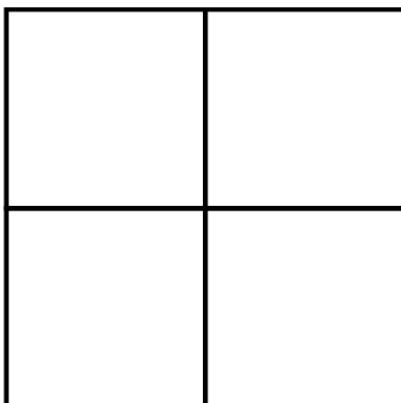
2 Shade in one half.

2 (a)



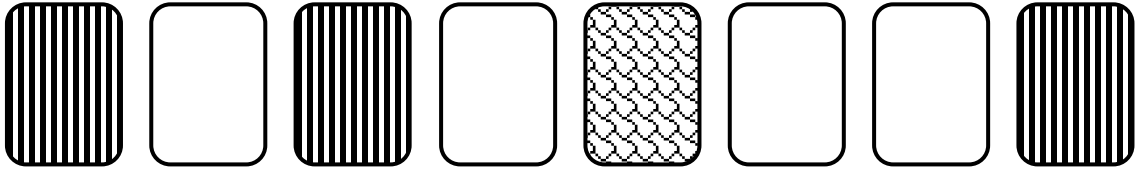
[1 mark]

2 (b)



[1 mark]

3 Look at the cards.



Tick the correct statement.

[1 mark]

Half of the cards are blank

Half of the cards have stripes

4 Work out half of

4 (a) 8

[1 mark]

4 (b) 14

[1 mark]

5 Ellie has 16 beads.

She gives half of them to Jonny.

How many beads does she give him?

[1 mark]

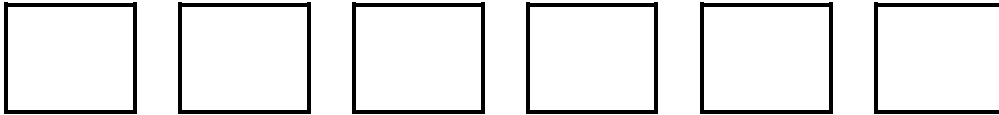
6 Shade half of the counters.

[1 mark]



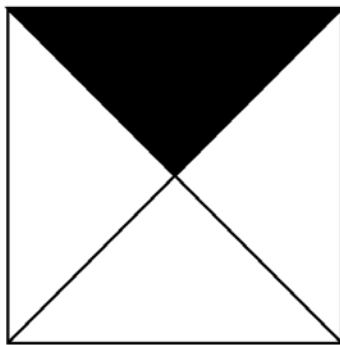
7 Shade one third of the tiles.

[1 mark]



8 What fraction of the square is shaded?

[1 mark]



9 Work out the next number in the pattern.

[1 mark]

$1\frac{1}{2}$ 2 $2\frac{1}{2}$ 3 _____

10 Work out

10 (a) $\frac{1}{4}$ of 20

[1 mark]

10 (b) one third of 18

[1 mark]

11 Alice has 15 apps.

11 (a) Jed has twice as many as Alice.

How many does he have?

[1 mark]

11 (b) Harris has four times as many as **Alice**.

How many does he have?

[1 mark]

- 12 Circle the **two** fractions that have the same value.

[1 mark]

$$\frac{1}{2} \quad \frac{2}{3} \quad \frac{2}{4} \quad \frac{3}{5}$$

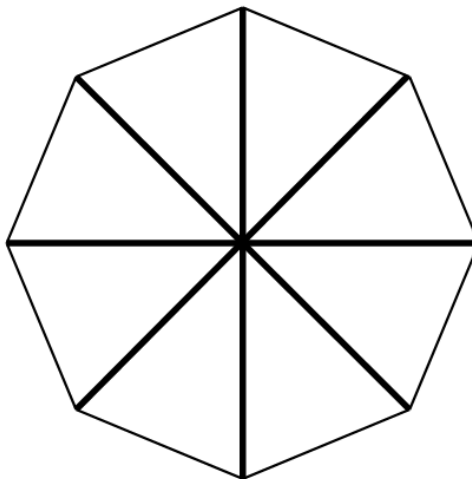
- 13 Davi raised £10 for charity.
Eric raised three times as much.
How much did Eric raise?

[1 mark]

£ _____

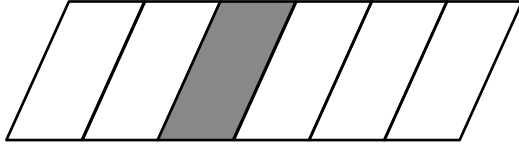
- 14 Shade one quarter of the shape.

[1 mark]



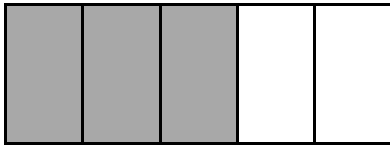
15 (a) What fraction of the shape is shaded?

[1 mark]



15 (b) What fraction of the shape is shaded?

[1 mark]



16 Work out

16 (a) $\frac{1}{7}$ of 35

[1 mark]

16 (b) $\frac{2}{3}$ of 24

[1 mark]

17 Work out three fifths of 30

[1 mark]

18 Work out

18 (a) $\frac{2}{5} + \frac{1}{5} = \text{---}$

[1 mark]

18 (b) $\frac{6}{7} - \frac{4}{7} = \text{---}$

[1 mark]

- 19** Katie has 50 texts left for the next 7 days.
Does she have enough to send 8 texts a day?
Show how you decide.

[2 marks]

- 20** Fill in the missing number to make the fractions equivalent.

[1 mark]

$$\frac{1}{4} = \frac{\quad}{12}$$

END OF QUESTIONS

There are no questions printed on this page

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