AQA

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 _____

5930/3

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

1   Fill in the missing numbers.

1 (a) $4 + 5 = 3 + $ ☐

[1 mark]

1 (b) $14 + 4 = 11 \ + $ ☐

[1 mark]

1 (c) $9 - 3 = 18 - $ ☐

[1 mark]

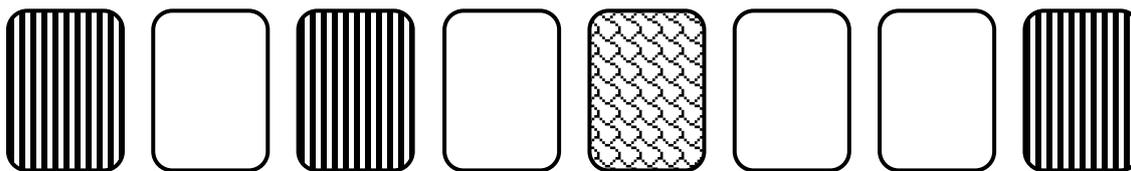**2**   Shade in one half.

[1 mark]

2 (a)

2 (b)
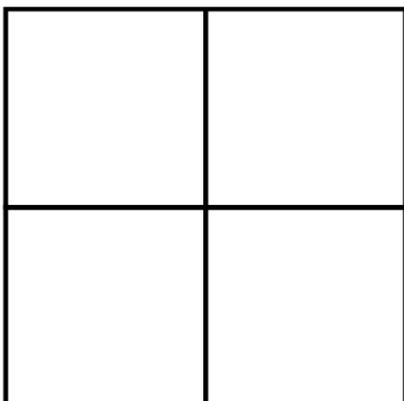
[1 mark]

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.
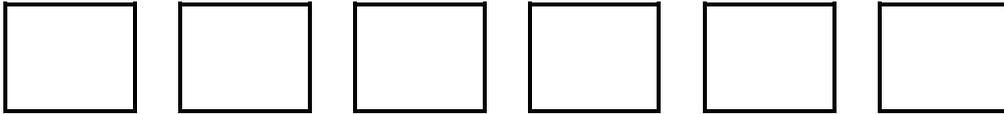
How many beads does she give him?

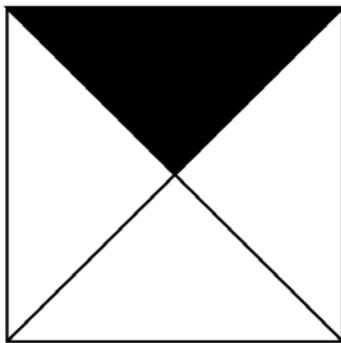[1 mark]

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) $\dfrac{1}{4}$ 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]

Turn over ▶

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

[1 mark]

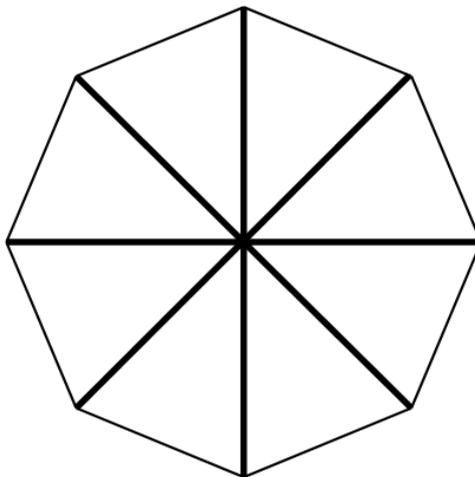$$\frac{1}{2} \qquad \frac{2}{3} \qquad \frac{2}{4} \qquad \frac{3}{5}$$

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) $\dfrac{1}{7}$ of 35

[1 mark]

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

[1 mark]

Turn over ▶

17 Work out three fifths of 30

[1 mark]

18 Work out

18 (a) $\dfrac{2}{5} + \dfrac{1}{5} = \text{——}$

[1 mark]

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

[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]

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

END OF QUESTIONS

There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**