Foundation GCSE Mini Test 3
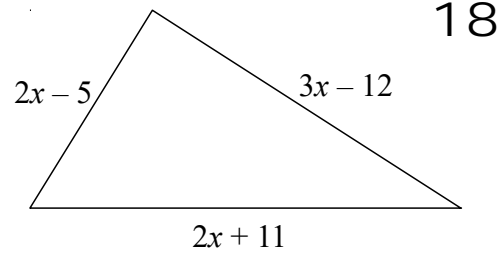
1 Increase £320 by 29%

412.8

2 The perimeter of the triangle is 120 cm.
Work out the value of x.

18

$2x - 5$ $3x - 12$

$2x + 11$

3 The nth term of a sequence is $n^2 + 15$

Find the first three terms of this sequence.

16, 19, 24

4 In a bag there are only red counters, blue counters and white counters.

The probability of getting a blue counter is the same as the probability of getting a white counter.

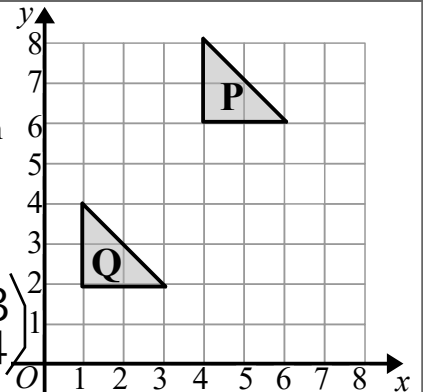| Colour	Red	Blue	White
Probability	0.18	0.41	0.41

Find the probability that counter will be blue.

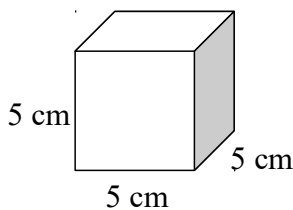**5** Work out $1\frac{2}{3} \div \frac{3}{5}$

$\frac{25}{9}$ or $2\frac{7}{9}$

6 Describe fully the single transformation that maps trapezium **P** on trapezium **Q**.

translation
by vector $\begin{pmatrix} -3 \\ -4 \end{pmatrix}$

7 Find the volume of the cube.

5 cm

5 cm

5 cm

125cm³

8 A model plane has the length of 13 cm.

The scale of the model is 1:72

Work out the length of the real plane.
Give your answer in metres.

9.36 metres

9 The size of each interior angle in a regular polygon is 162°

Work out how many sides the polygon has.

20

10 The ratio of circles to squares is 2:5

Write down the fraction of shapes that are squares.

$\frac{5}{7}$

11 Find an estimate for the mean time.

Time (minutes)	Frequency
$15 < t \leqslant 17$	5
$17 < t \leqslant 19$	12
$19 < t \leqslant 21$	7
$21 < t \leqslant 23$	6

18.9mins

12

A circle has a radius of 23 centimetres.
Work out an estimate for the area of the circle.

400π cm²

13 Write down the reciprocal of 5

$$\frac{1}{5}$$
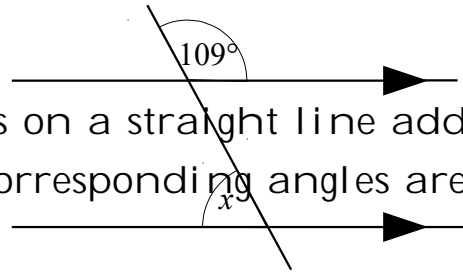
14 n is an integer such that $-3 \leq n < 2$

Write down all the possible values of n.

-3, -2, -1, 0, 1

15 A circle has a diameter of 17 cm.
Work out the area of the circle.
Give your answer correct to 2 decimal places.

226.98cm²

16

109°

Angles on a straight line add to 180⁰
and corresponding angles are equal

x⁰

Write down the size of angle x.
Give a reason for your answer.

71⁰

17 Find the highest common factor (HCF)
of 60 and 105

15

18

Karen buys a pack of 6 bottles of water.
The pack costs £1.20

Karen sells all 6 bottles of water for 35p each.

Work out Karen's percentage profit.

75%

19

A pair of trainers cost 3500 rupees in India.

The exchange rate is £1 = 98 rupees.

Work out the cost of the trainers in pounds (£).

£35.71

20

Jerry and Mick share some money in the ratio 2 : 3
Mick gets £600

Work out how much money Jerry gets.

£400

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