

Foundation GCSE Mini Test 2

- 1** Decrease £9500 by 7%

£8835

- 2** Alex has some marbles.
Billie has three times as many marbles as Alex.
Chris has 9 fewer marbles than Billie.

In total they have 68 marbles.
How many marbles does Alex have?

11

- 3** Here are the first 5 terms of a sequence.

2 9 16 23 30

Find an expression, in terms of n , for the n th term of this sequence.

$7n - 5$

- 4** The probability that a biased dice will land on a 6 is 0.32

The dice is going to be rolled 200 times.

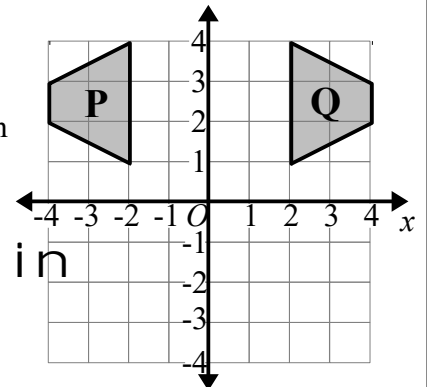
Work out an estimate for the number of times the dice will land on 6.

64

- 5** Work out $2\frac{3}{4} + 1\frac{3}{7}$

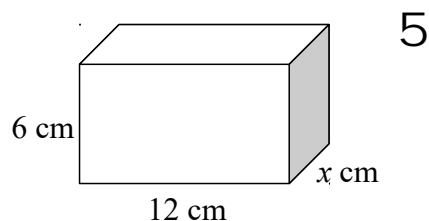
$\frac{117}{28}$ or $4\frac{5}{28}$

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



Reflection in
the y axis

- 7** The volume of the cuboid is 360 cm^3 .
Find the value of x .



- 8** A car is 5.7 metres long.
A scale model of the car is being made.
The scale of the model is 1:50
Work out the length of scale model.
Give your answer in centimetres.

11.4 cm

- 9** The size of each exterior angle in a regular polygon is 15°

Work out how many sides the polygon has.

24

- 10** The ratio of red pens to green pens is 5:4

Write down the fraction of pens that are red.

$\frac{5}{9}$

11 Work out the mean number of points per game.

Points	Frequency
0	9
10	11
20	18
30	7

15.1

12

Work out an estimate for the value of $\frac{50.6 \times 19.21}{0.47}$

2000 (or 2040 or 1900)

13

Simplify $4m^3n^2 \times 5m^2n$

$20m^5n^3$

14

Solve $3(2n - 5) < 15$

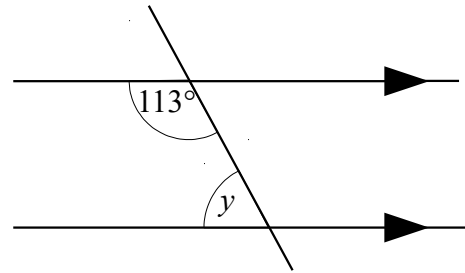
$n < 5$

15

A circle has a diameter of 16 cm.
Work out the circumference of the circle.
Give your answer in terms of π .

16π cm

16



Write down the size of angle y .

Give a reason for your answer.

67°

Co-interior Angles add to 180°

17

Write 140 as a product of its prime factors.

$2 \times 2 \times 5 \times 7$

or $2^2 \times 5 \times 7$

18

Richard buys a car for £14 000
He sells the car for £9 100

Work out Richard's percentage loss.

35%

19

Carla is on holiday in Italy.
She spends €45 in a restaurant.

The exchange rate is €1 = £0.89

Calculate how much Carla spends in pounds (£).

£40.05

20

Dave is making cookies.

He mixes flour, butter and sugar in the ratio 5 : 4 : 1

Dave uses 220 grams of butter.

Work out how much flour and sugar Dave uses.

55 grams