Foundation GCSE Mini Test 4

1 Work out 91% of 360

327.6

2 Work out the value of x.

$2x + 20$

$3x + 15$
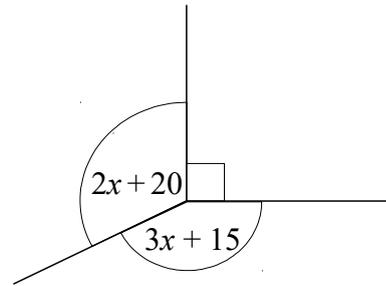
47

3 Here are the first 5 terms of a sequence.

10   16   22   28   34

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

6n + 4

4 The probability that a sunflower seed will germinate is 0.7

Alan is going to plant 150 sunflower seeds.

Work out an estimate for the number of seeds that will germinate.

105

5 Work out $\frac{3}{4} \times 1\frac{1}{5}$

$\frac{9}{10}$

6

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

Enlargement
Scale Factor 2
Centre O
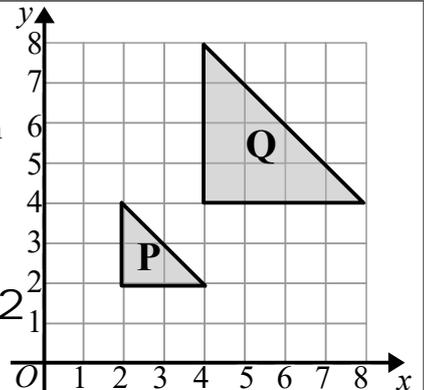
7 Find the total surface area of the cube.

5 cm

5 cm

5 cm
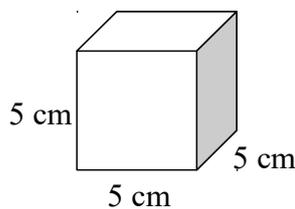
150cm²

8 A map has the scale of 1:50000

The distance between two towns is 14 km.

Work out the distance between the two towns on the map. Give your answer in centimetres.

28 cm

9 The size of each exterior angle in a regular polygon is 30°

Work out how many sides the polygon has.

12

10 There are red shapes and blue shapes in a box,

$\frac{2}{3}$ of the shapes are red.

Write the ratio of red shapes to blue shapes.

2 : 1

11 Find an estimate for the mean temperature.

Temperature (°C)	Frequency
$14 < t \leqslant 18$	4
$18 < t \leqslant 22$	18
$22 < t \leqslant 26$	5
$26 < t \leqslant 30$	3

20.9⁰C

12 Dennis gets paid £9.21 per hour he works.
Each week Dennis works 42 hours.

Work out an estimate for the amount
Dennis gets paid in a week.

£360 (or £400)

13 Simplify $(5ab^2)^3$

125a³b⁶

14 n is an integer such that $-5 < 2n < 7$
Write down all the possible values of n.

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

15 A circle has a radius of 12 cm.
Work out the area of the circle.
Give your answer in terms of π.

144π cm²

16 Alternate angles are equal

Angles at the base of an isosceles triangle are equal

53°

Angles on a straight line are equal

x
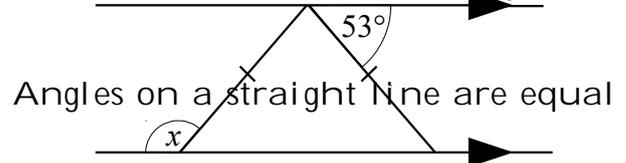
Write down the size of angle x.
Give a reason for your answer. 127⁰

17 Find the lowest common multiple (LCM)
of 24 and 40

120

18 Banana computers sold 20 million computers in 2017.

In 2018, they sold 18.4 million computers.

Work out the percentage decrease in the number of computers sold.

8%

19 Nicole is on holiday in France.
She spends €14.50 in a cafe.

The exchange rate is £1 = €1.12

Calculate how much Nicole spends in pounds (£).

£12.95

20 Carly and James share some money in the ratio 5 : 3
Carly gets £32 more than James.

Work out how much money James gets.

£48