Foundation GCSE Mini Test 5

1 Decrease £250 by 15%

£212.50

2 Work out the value of *x*.

$2x + 5$

x ___ *x*

$3x - 2$

x = 7
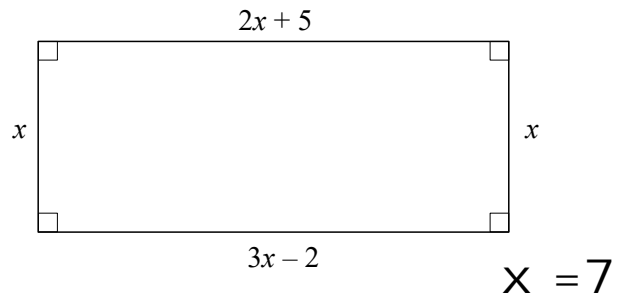
3 Here are the first five terms of a Fibonacci sequence

1   1   2   3   5

Write down the next two terms in the sequence.

8, 13

4 In a bag there are only red counters, blue counters and white counters.
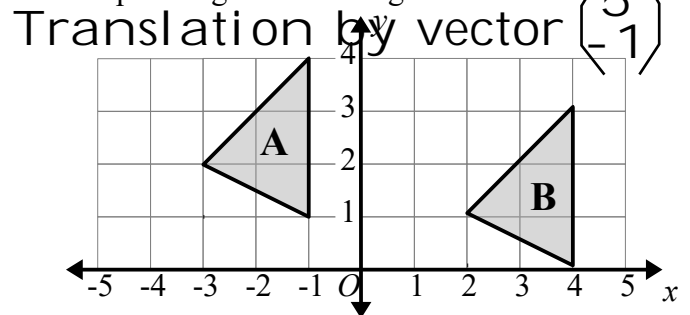A counter is taken at random from the bag.

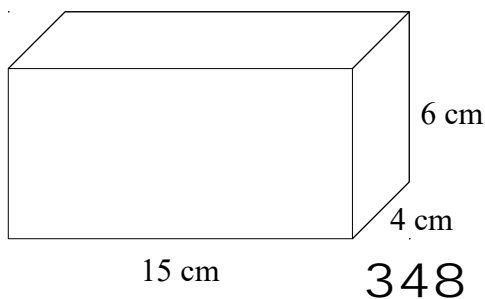| Colour	Red	Blue	White
Probability	0.18	0.36	0.46

Find the probability that counter will be blue.

5 Work out $\frac{7}{8} - \frac{3}{4}$

$\frac{1}{8}$

6 Describe fully the single transformation that maps triangle **A** on triangle **B**.

Translation by vector $\begin{pmatrix} 5 \\ -1 \end{pmatrix}$

7 Find the total surface area of the cuboid.

6 cm

4 cm

15 cm

348 cm^2

8 A model car has the length of 9cm.

The scale of the model is 1:50

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

4.5 metres

9 Work out the size of each interior angle in a regular octagon.

135°

10 There are only green pens, black pens and red pens in a box.

There are four times as many green pens as black pens.
There are twice as many red pens as green pens.

Write down the ratio of green pens to black pens to red pens.

4 : 1 : 8

11 Find an estimate for the mean time.

Time (minutes)	Frequency
$0 < t \leqslant 10$	5
$10 < t \leqslant 20$	13
$20 < t \leqslant 30$	16
$30 < t \leqslant 40$	6

20.75 minutes

12

Work out an estimate for the value of $\dfrac{19.3 + 61.75}{0.21}$

400 (or 405)

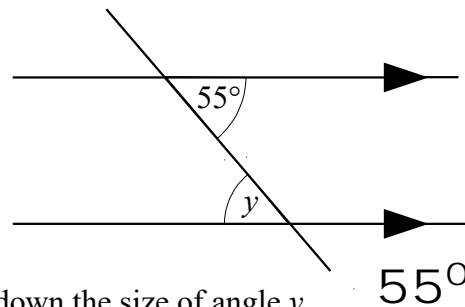**13** Simplify $d^7 \div d^4$

d^3

14 Solve $5x + 5 \leq x + 21$

x ≤ 4

15 A circle has a radius of 7.3 cm.
Work out the circumference of the circle.
Give your answer correct to 2 decimal places.

45.87 cm

16

55°

y

55^0

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

Alternate angles are equal

17 Find the lowest common multiple (LCM)
of 48 and 72

144

18 Last year Patrick paid £2140 for his annual
train ticket.
This year he has to pay £2266 for his
annual train ticket.

Work out the percentage increase in the
cost of his train ticket.
Give your answer correct to 1 decimal
place.

5.9%

19

Amy is on holiday in Turkey
She changes £200 to Turkish lira.

The exchange rate is £1 = 10.65 Turkish lira

Calculate how many Turkish lira Amy receives

2130 TL

20 Will and Olly share £1200 in the ratio 3 : 2

Work out how much each of them get.

£720 : £480