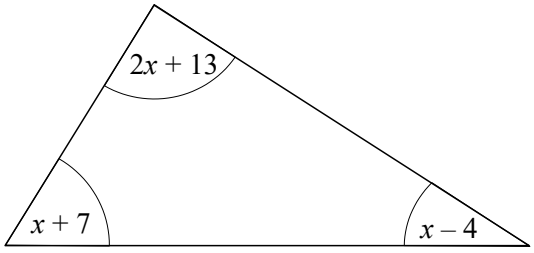
Foundation GCSE Mini Test 1

1 Work out 135% of 160

2 Work out the value of x.



3 Here are the first 5 terms of a sequence.

29 25 21 17 13

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

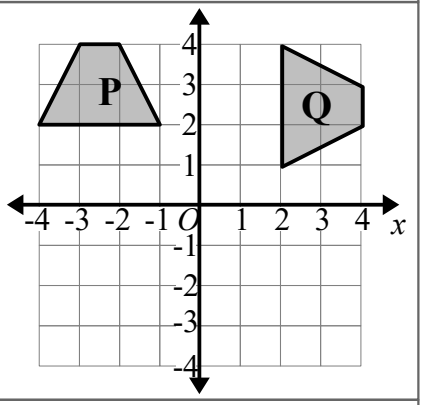
4 In a bag there are only red counters, blue counters and white counters.
A counter is taken at random from the bag.

Colour	Red	Blue	White
Probability	0.42	0.3	

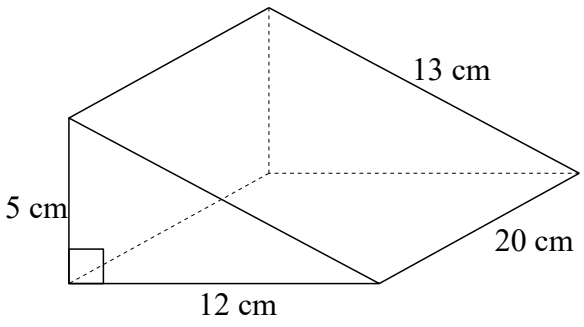
Find the probability that counter will be white.

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

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



7 Find the total surface area of the triangular prism.



8 A map has the scale of 1:50000

The distance between two points on the map is 10 cm.

Work out the real distance between the two points. Give your answer in kilometres.

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

10 In April, it rained on $\frac{3}{5}$ of days

Write the ratio of the days it rained to the number of days it did not rain.

11 Find an estimate for the mean height.

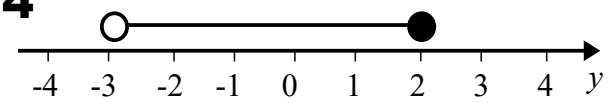
Height (cm)	Frequency
$140 < h \leqslant 150$	5
$150 < h \leqslant 160$	8
$160 < h \leqslant 170$	10
$170 < h \leqslant 180$	2

12 Mr Sykes wants to buy a calculator for every student in year 11.
There are 113 students in year 11.
Each calculator costs £8.95

Work out an estimate for the amount of money Mr Sykes will spend on calculators.

13 Write down the value of 5^0

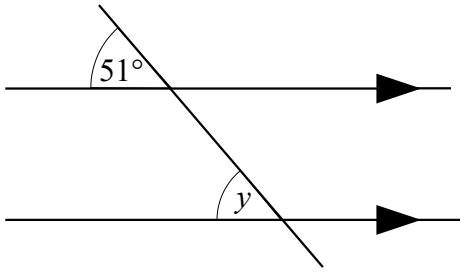
14



Write down the inequality shown on the number line.

15 A circle has a radius of 9 cm.
Work out the area of the circle.
Give your answer in terms of π.

16



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

17 Find the highest common factor (HCF) of 72 and 120

18 Emma buys a house for £250 000
She sells the house for £263 750

Calculate the percentage profit Emma makes.

19 Beth goes on holiday to Spain.
The exchange rate is £1 = €1.12

She changes £350 into Euros (€).

Work out how many Euros she receives.

20 Molly, Paige and Demi share 42 sweets in the ratio 4 : 2 : 1

Work out the number of sweets that each of them receives.