## Foundation GCSE Mini Test 1

1 Work out $135 \%$ of 160

## 216

3 Here are the first 5 terms of a sequence.

$$
\begin{array}{lllll}
29 & 25 & 21 & 17 & 13
\end{array}
$$

Find an expression, in terms of $n$, for the $n$th term of this sequence.
(5 Work out $\frac{3}{4}-\frac{1}{5}$

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

2 Work out the value of $x$.


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 | 0.28 |

Find the probability that counter will be white.

## 6

Describe fully the single transformation that maps trapezium $\mathbf{P}$ on trapezium $\mathbf{Q}$.

## R otation,

## $90^{\circ} \mathrm{Cl}$ ockwise, Cetntre 0

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.

## 5 km

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.

3:2

11 Find an estimate for the mean height.

| Height (cm) | Frequency |
| :---: | :---: |
| $140<\mathrm{h} \leqslant 150$ | 5 |
| $150<\mathrm{h} \leqslant 160$ | 8 |
| $160<\mathrm{h} \leqslant 170$ | 10 |
| $170<\mathrm{h} \leqslant 180$ | $\mathbf{1}^{2} 58.6 \mathrm{~cm}$ |

13 Write down the value of $5^{0}$
1

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

## $81 \pi \mathrm{~cm}^{2}$

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.
$£ 900$ or $£ 990$ or $£ 1000$ or $£ 1100$

14


Write down the inequality shown on the number line.
$-3<y \leq 2$

16


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

24

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.
$€ 392$

18 Emma buys a house for $£ 250000$
She sells the house for $£ 263750$
Calculate the percentage profit Emma makes.

$$
5.5 \%
$$

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

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

$$
24: 12: 6
$$

