

- 1 Write down the remainder when the square of 8 is divided by 12. \_\_\_\_\_
- 2  $\frac{2}{3}(65 - 56) =$  \_\_\_\_\_
- 3 What is the value of  $2^7 \div 2^4$ ? \_\_\_\_\_
- 4 Share £550 in the ratio 5:6. \_\_\_\_\_
- 5 Write 24% of 35 as a decimal. \_\_\_\_\_
- 6  $325 \times 0.1 =$  \_\_\_\_\_
- 7  $2 \times 0.2 \times 0.02 =$  \_\_\_\_\_
- 8 0.00398 becomes 0.004 when rounded to three significant figures. True or false? \_\_\_\_\_
- 9  $\frac{1}{2} < \frac{27}{36} < \frac{5}{6}$ . True or false? \_\_\_\_\_
- 10 If  $a = 2$ ,  $b = 3$ ,  $c = 0$ , find the value of  $a^3 - \frac{bc}{a}$ . \_\_\_\_\_
- 11  $\frac{27}{x^2} = x$ , so  $x =$  \_\_\_\_\_
- 12 Write the next three terms of the sequence.  
2, 3, 5, 7, 11, 13, 17, 19, ■, ■, ■ \_\_\_\_\_
- 13 If I buy 40l of petrol at 64.5p per litre, how much change will I get from £30? \_\_\_\_\_
- 14 The price of a car costing £12 450 rises by 4%.  
What is the new price of the car? \_\_\_\_\_
- 15 Which is the larger quantity, **a** 2 litres or **b** half a gallon? \_\_\_\_\_
- 16 Which is the longer length, **a** 2 metres or **b** 6 feet? \_\_\_\_\_
- 17 A TV programme begins at 11.35 p.m. and ends at a quarter to two in the morning. How long is the programme? \_\_\_\_\_
- 18 Freya runs 100m in 12s. What is her speed in kilometres per hour? \_\_\_\_\_
- 19 A delivery van has a load space measuring 1.8m wide, 2m high and 2.4m long. How many parcels each measuring 50cm  $\times$  60cm  $\times$  80cm can be fitted inside? \_\_\_\_\_
- 20 A parallelogram is drawn so that its smallest angle is one third the size of its largest angle. How big is the largest angle? \_\_\_\_\_
- 21 Which letters of the word TORCH have one and only one axis of symmetry? \_\_\_\_\_
- 22 Find the area of a garden measuring 11.85m long and 6.05m wide to the nearest square metre. \_\_\_\_\_
- 23 A point  $P$  has coordinates  $(-2, 5)$ . It is translated by the mapping  $(x, y) \rightarrow (x + 3, y + 3)$ . What are the new coordinates of point  $P$ ? \_\_\_\_\_
- 24 On a map of scale 1:50 000, two towns are 12cm apart. What is the actual distance between the two towns in kilometres? \_\_\_\_\_
- 25 12 coloured balls are placed in a bag. Three are red, four are blue and the remainder are green. If one ball is taken from the bag, what is the probability that it will be green? \_\_\_\_\_