

- 1 Write down the remainder when the square of 8 is divided by 12. _____ r 4
- 2 $\frac{2}{3}(65 - 56) =$ _____ 6
- 3 What is the value of $2^7 \div 2^4$? _____ 8
- 4 Share £550 in the ratio 5:6. _____ £250 : £300
- 5 Write 24% of 35 as a decimal. _____ 8.4
- 6 $325 \times 0.1 =$ _____ 32.5
- 7 $2 \times 0.2 \times 0.02 =$ _____ 0.008
- 8 0.00398 becomes 0.004 when rounded to three significant figures. True or false? _____ false
- 9 $\frac{1}{2} < \frac{27}{36} < \frac{5}{6}$. True or false? _____ true
- 10 If $a = 2$, $b = 3$, $c = 0$, find the value of $a^3 - \frac{bc}{a}$. _____ 8
- 11 $\frac{27}{x^2} = x$, so $x =$ _____ 3
- 12 Write the next three terms of the sequence.
2, 3, 5, 7, 11, 13, 17, 19, ■, ■, ■ _____ 23, 29, 31
- 13 If I buy 40l of petrol at 64.5p per litre, how much change will I get from £30? _____ £4.20
- 14 The price of a car costing £12 450 rises by 4%.
What is the new price of the car? _____ £12 948
- 15 Which is the larger quantity, **a** 2 litres or **b** half a gallon? _____ b
- 16 Which is the longer length, **a** 2 metres or **b** 6 feet? _____ a
- 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? _____ 130min
- 18 Freya runs 100m in 12s. What is her speed in kilometres per hour? _____ 30km/h
- 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? _____ 36
- 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? _____ 135°
- 21 Which letters of the word TORCH have one and only one axis of symmetry? _____ T, C
- 22 Find the area of a garden measuring 11.85m long and 6.05m wide to the nearest square metre. _____ 72m²
- 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 ? _____ (1, 8)
- 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? _____ 6km
- 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? _____ $\frac{5}{12}$