

You must write down all the stages in your working.

- 1 Write the number thirty-five thousand three hundred in figures.

..... $35,300$

(Total for Question 1 is 1 mark)

- 2 Write the number thirty-seven thousand six hundred in figures.

..... $37,600$

(Total for Question 2 is 1 mark)

- 3 Write the number fifty-five thousand nine hundred and twelve in figures.

..... $55,912$

(Total for Question 3 is 1 mark)

- 4 Write the number ninety-five thousand eight hundred and four in figures.

..... $95,804$

(Total for Question 4 is 1 mark)

- 5 Write the number sixty-eight thousand four hundred sixty-one in figures.

..... $68,461$

(Total for Question 5 is 1 mark)

- 6 Write the number seventy-nine thousand and fifty-two in figures.

..... $79,052$

(Total for Question 6 is 1 mark)

- 7 Write 31% as a fraction.

..... $\frac{31}{100}$

(Total for Question 7 is 1 mark)

- 8 Write 50% as a fraction.

..... $\frac{50}{100} = \frac{1}{2}$

(Total for Question 8 is 1 mark)

- 9 Write 75% as a fraction.

..... $\frac{75}{100} = \frac{3}{4}$

(Total for Question 9 is 1 mark)

10 Write 5% as a fraction.

$$\frac{5}{100} = \frac{1}{20}$$

(Total for Question 10 is 1 mark)

11 Write 40% as a fraction.

$$\frac{40}{100} = \frac{2}{5}$$

(Total for Question 11 is 1 mark)

12 Simplify $4p \times 5$

$$20p$$

(Total for Question 12 is 1 mark)

13 Simplify $4t \times 9$

$$36t$$

(Total for Question 13 is 1 mark)

14 Simplify $6d \times 3$

$$18d$$

(Total for Question 14 is 1 mark)

15 Simplify $7r \times 8$

$$56r$$

(Total for Question 15 is 1 mark)

16 Simplify $9y \times 3$

$$27y$$

(Total for Question 16 is 1 mark)

17 Write 957 to the nearest hundred.

1000

(Total for Question 17 is 1 mark)

18 Write 509 to the nearest ~~ten~~.

510

(Total for Question 18 is 1 mark)

19 Write 302 to the nearest ten.

300

(Total for Question 19 is 1 mark)

20 Write 792 to the nearest hundred.

800

(Total for Question 20 is 1 mark)

21 Write 634 to the nearest ten.

630

(Total for Question 21 is 1 mark)

22 Change 5 litres into millilitres

1 l = 1,000 ml

5,000

(Total for Question 22 is 1 mark)

- 23 Change 7 litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$7,000 \text{ ml}$$

(Total for Question 23 is 1 mark)

- 24 Change 2 litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$2,000 \text{ ml}$$

(Total for Question 24 is 1 mark)

- 25 Change 3 litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$3,000 \text{ ml}$$

(Total for Question 25 is 1 mark)

- 26 Change 6 litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$6,000 \text{ ml}$$

(Total for Question 26 is 1 mark)

- 27 Change $2\frac{1}{2}$ litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$2,500 \text{ ml}$$

(Total for Question 27 is 1 mark)

- 28 Change $3\frac{3}{4}$ litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$3,750 \text{ ml}$$

(Total for Question 28 is 1 mark)

- 29 Change $5\frac{1}{4}$ litres into millilitres

$$1 \text{ l} = 1,000 \text{ ml}$$

$$5,250 \text{ ml}$$

(Total for Question 29 is 1 mark)

- 30 There are four items for sale.

A toy car costs £12. A deck chair costs £75. A tent costs £295. A small car costs six times as much as the tent.

Lily and Gabby decide to share the cost of all four items.

How much do they each have to pay?

Cost of car

$$\begin{array}{r} 295 \\ 6 \times \\ \hline 1770 \end{array}$$

Cost Each

$$\begin{array}{r} 1076 \\ 2 \overline{) 2152} \\ \hline \end{array}$$

Total cost

$$\begin{array}{r} 1770 \\ 295 + \\ 75 \\ 12 \\ \hline 2152 \end{array}$$

£.....1076.....

(Total for Question 30 is 3 marks)

- 31 Five friends decide to go together on holiday. They go for eight days and seven nights.

They hire a car at a cost of £120 per day. Petrol for their journey costs a total of £245.

The hotel costs £84 per night for a single room and £102 per night for a double room. The friends need two double rooms and one single room.

The friends take £360 each to spend.

They start saving for their holiday at a rate of £80 each per week.

How long do they need to save in order to pay the costs of their holiday assuming they all pay an equal share.

Car Costs

$$(120 \times 8) + 245 = 960 + 245 = £1205$$

Hotel Costs

$$7(102 + 102 + 84) = 7(288) = £2016$$

Total Spending Money

$$5 \times 360 = £1800$$

Total Holiday Costs

$$1205 + 2016 + 1800 = £5021$$

Cost per person

$$5021 \div 5 = £1004.20$$

Number of Weeks

$$1004.20 \div 80 = 12.5525$$

.....13 weeks.....

(Total for Question 31 is 5 marks)

- 32 It is Christmas and Lewis and Georgette want to buy some presents for their parents.

The buy their father a watch and their mother a necklace.

The watch costs £452.96 and the necklace costs £399.95.

Wrapping a paper costs £3.95 and a card for each parent costs £1.99 and £2.25.

The two siblings contribute equally to the overall cost of the presents, the cards and the wrapping paper.

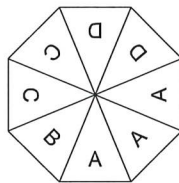
How much does each sibling pay?

$$\text{Total Cost: } 452.96 + 399.95 + 3.95 + 1.99 + 2.25 = £861.10$$
$$\text{Cost per Sibling: } 861.10 \div 2 = £430.55$$

£.....**430.55**.....

(Total for Question 32 is 3 marks)

- 33 Memphis spins a fair octagonal spinner.



Memphis spins the spinner once.

- (a) Is Memphis more likely to spin a vowel or a consonant?
Give a reason for your answer.

There are 3 places where he can spin a vowel and 5 for a consonant.

Consonant.....(1)

- (b) Write down the probability that Memphis spins a B.

$\frac{1}{8}$

.....(1)

Memphis spins the spinner 300 times.

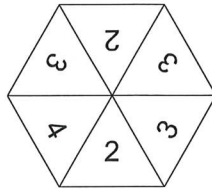
- (c) Work out an estimate for the number of times Memphis spins a D.

$$\frac{2}{8} \times 300 = \frac{600}{8} =$$

75 times.....(2)

(Total for Question 33 is 4 marks)

- 34 Sael spins a fair hexagonal spinner.



He spins the spinner once.

- (a) Is Sael more likely to spin an odd or an even number?

Give a reason for your answer.

Equally likely to spin an odd or even number as there are 3 parts of each.

.....(1)

- (b) Write down the probability that Sael spins a 5.

0
.....(1)

Sael spins the spinner 500 times.

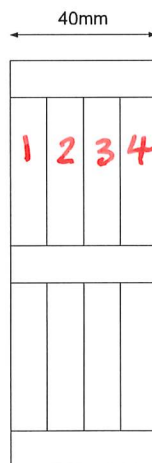
- (c) Work out an estimate for the number of times Sael spins a 2.

$$\frac{2}{6} \times 500 = \frac{1000}{3} = 166\frac{2}{3}$$

167
.....(2)

(Total for Question 34 is 4 marks)

- 35 This shape is made of eleven rectangles that are all the same size.



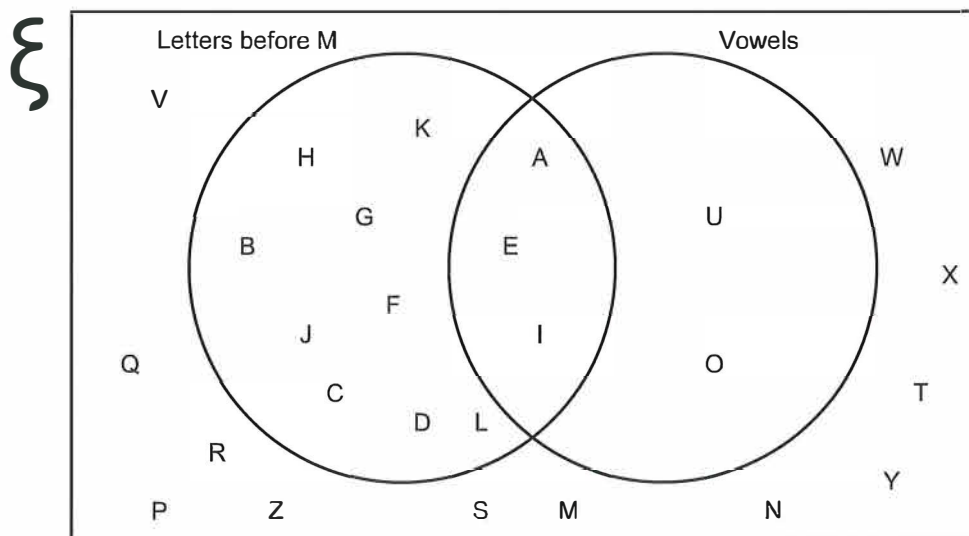
$$\begin{aligned} &40 \\ &10 \\ &40 \div 4 = 10 \\ &40 \times 10 = 400 \text{ mm}^2 \\ &400 \times 11 = 4400 \text{ mm}^2 \end{aligned}$$

Work out the area of the shape.

4400 mm²
.....

(Total for Question 35 is 3 marks)

36 Here is a Venn diagram.



(a) Write down the letters that are in set

a. $\text{Letters before M} \cap \text{Vowels}$

and

AEI

(1)

b. $\text{Letters before M} \cup \text{Vowels}$

BHKGJFCDLAEIOU

(1)

(b) How many letters are in set $(\text{Vowels})'$?

Not Vowels

21

(1)

(Total for Question 36 is 3 marks)

37 $x = 0.932$ correct to three decimal places

Complete the error interval for x .

$0.9315 \leq x < 0.9325$

(Total for Question 37 is 2 marks)

38 $x = 0.19$ correct to two decimal places

Complete the error interval for x .

$$\underline{0.185} \leq x < \underline{0.195}$$

(Total for Question 38 is 2 marks)

39 $x = 0.35$ correct to two decimal places

Complete the error interval for x .

$$\underline{0.345} \leq x < \underline{0.355}$$

(Total for Question 39 is 2 marks)

40 $x = 5.725$ correct to three decimal places

Complete the error interval for x .

$$\underline{5.7245} \leq x < \underline{5.7255}$$

(Total for Question 40 is 2 marks)

41 $x = 3.162$ correct to three decimal places.

Write the error interval for x .

$$\underline{3.1615} \leq x < \underline{3.1625}$$

(Total for Question 41 is 2 marks)

42 $x = 12.46$ correct to two decimal places

Write the error interval for x .

$$\underline{12.455} \leq x < \underline{12.465}$$

(Total for Question 42 is 2 marks)

43 $x = 12.46$ correct to two decimal places

Write the error interval for x .

$$\underline{12.455} \leq x < \underline{12.465}$$

(Total for Question 43 is 2 marks)

- 44 Blake buys a watch for £5000.

The watch gains value each year at a rate of 4% of the value it had at the start of the year.

What is the value of Blake's watch after ten years?

$$5000 \times 1.04^{10} = 7401.221425$$

£ 7401.22

(Total for Question 44 is 4 marks)

- 45 Arshida buys a car for £24,950.

The car loses value each year at a rate of 6% of the value it had at the start of the year.

What is the value of Arshida's car after four years?

$$\text{Arshida} \quad \frac{100-6}{100} = 0.94$$

$$24950 \times 0.94^4 = 19,479.68655$$

£ 19,479.69

(Total for Question 45 is 4 marks)