



NON CALCULATOR QUESTIONS

1. Kath knows a quick way to work out 15% of any amount of money.

Use Kath's method to work out 15% of £420.

$$\begin{aligned} 10\% \text{ of } 420 &= 42 \\ 5\% \text{ of } 420 &= 21 \\ 15\% &= 10\% + 5\% = 63 \end{aligned}$$

To work out 15% of £160

$$\begin{aligned} 10\% \text{ of } £160 &= £16 \\ \text{So } 5\% \text{ of } £160 &= £8 \\ \text{So } 15\% \text{ of } £160 &= £24 \end{aligned}$$



Answer £ 63.....

(Total 3 marks)

2. Work out 70% of 90.

$$\begin{aligned} 10\% \text{ of } 90 &= 9 \\ 70\% \text{ of } 90 &= 63 \end{aligned}$$

Answer 63.....

(Total 2 marks)

3. Jim receives his electricity bill.
The bill is for £140 plus VAT at 5%.

- (a) Calculate the VAT.

$$\begin{aligned} 10\% \text{ of } £140 &= £14 \\ 5\% \text{ of } £140 &= £7 \end{aligned}$$

Answer £ 7.....

(2)

- (b) Hence find the total amount which Jim has to pay.

$$\begin{aligned} &£140 + \text{VAT} \\ &£140 + £7 \end{aligned}$$

Answer £ 147.....

(1)

(Total 3 marks)

4. The price of a white fridge is £250.
A silver fridge costs 8% more than the white fridge.

Calculate the extra cost of the silver fridge.

$$\begin{aligned} 10\% \text{ of } £250 &= £25 \\ 1\% &= £2.50 \\ 2\% &= £5 \end{aligned}$$

Answer £ 20.....

(Total 2 marks)

$$8\% = 10\% - 2\% = £25 - £5$$

5. Mr and Mrs Smith are buying a washing machine.

How much do they save in the sale?

$$10\% \text{ of } \pounds 380 = \pounds 38$$

$$5\% \text{ of } \pounds 380 = \pounds 19$$

$$15\% \text{ of } \pounds 380 = \pounds 57$$

Answer £ 57
(Total 2 marks)



6. Liz says that 34% of 250 and 25% of 340 are equal.

Is she correct?
Explain your answer.

$$10\% \text{ of } 250 = 25$$

$$30\% \text{ of } 250 = 75$$

$$1\% \text{ of } 250 = 2.5$$

$$4\% \text{ of } 250 = 10$$

$$34\% \text{ of } 250 = \underline{\underline{85}}$$

$$50\% \text{ of } 340 = 170$$

$$25\% \text{ of } 340 = \underline{\underline{85}}$$

Answer correct
(Total 3 marks)

7. (a) Vikki earns £5.30 an hour working at a cinema.
Each week she works 5 days.
Each day she works 8 hours.

How much does Vikki earn each week?

$$8 \text{ hours} \times \pounds 5.30 = \pounds 42.40 \text{ a day}$$

$$\pounds 42.40 \text{ a day} \times 5 \text{ days} = \pounds 212$$

Answer £ 212

(3)

(b) 700 people attend the cinema one evening.

(i) Of the 700 people, 65% are adults.

How many of the people are adults?

$$10\% \text{ of } 700 = 70$$

$$5\% \text{ of } 700 = 35$$

$$60\% \text{ of } 700 = 420$$

$$65\% \text{ of } 700 = 455$$

Answer 455 adults

(2)

(Total 5 marks)



CALCULATOR QUESTIONS

8. Work out 28% of 32

$$32 \div 100 \times 28 = 8.96$$

Answer 8.96

(Total 2 marks)

9. Jim buys furniture for £74.40.
Delivery will cost Jim an extra 5%.

How much is the delivery charge?

$$74.40 \div 100 \times 5 = 3.72$$

Answer £ 3.72

(Total 2 marks)

10. Mrs Brown's bill for servicing her car is £96 plus VAT.
VAT is charged at 17.5%.

What is her total bill?

$$17.5\% \text{ of } \pounds 96 = \pounds 96 \div 100 \times 17.5 = \pounds 16.80$$

$$\text{Total bill } \pounds 96 + \pounds 16.80 = 112.80$$

Answer £ 112.80

(Total 2 marks)

11. Mary buys a new kitchen for £5390.

(a) Mary pays a 10% deposit.
How much is the deposit?

$$10\% \text{ of } \pounds 5390 = \pounds 539$$

Answer £ 539

(1)

(b) After paying the deposit, Mary pays the rest of the cost in 12 equal instalments.

How much is each instalment?

$$\pounds 5390 - \pounds 539 = \pounds 4851$$

$$\pounds 4851 \div 12 = 404.25$$

Answer £ 404.25

(3)

(Total 4 marks)

12. Emily earns £12 500 per year.

She gets a pay rise of 3.2%
After her pay rise how much does she earn?

$$3.2\% \text{ of } \pounds 12500 = \pounds 12500 \div 100 \times 3.2 = \pounds 400$$

$$\pounds 12500 + 400 = \pounds 12900$$

Answer £ £12900

(Total 3 marks)

13. Joe wants to buy a pack of 10 CDs.
He sees two offers.

Which of these two packs is the cheaper?
You **must** show all your working.

$$17.5\% \text{ of } \pounds 7.70 = 7.70 \div 100 \times 17.5 = \pounds 1.35 \text{ (2.dp)}$$

$$\pounds 7.70 + \pounds 1.35 = \pounds 9.05$$

<p>PRICECUT Pack of 10 CDs £7.70 plus 17.5% VAT</p>	<p>SAVER STORE Pack of 10 CDs £8.99 including VAT</p>
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Saver Store is cheaper
at £8.99
(Total 3 marks)

14. Hassan earns £26 000 per year.
The first £5000 is tax free.
He pays 22% of the remaining salary in tax.

How much tax does he pay?

$$\pounds 26000 - \pounds 5000 = \pounds 21000$$

$$22\% \text{ of } \pounds 21000 = 21000 \div 100 \times 22 = \pounds 4620$$

Answer £ £4620

(Total 2 marks)

15. Miss Evans earns £240 per week.
She is awarded a pay rise of 3.5%.

Mr Dale earns £220 per week.
He is awarded a pay rise of 4%.

Whose weekly pay increases by the greater amount of money?
You **must** show all your working.

$$3.5\% \text{ of } \pounds 240 = 240 \div 100 \times 3.5 = \pounds 8.40$$

$$4\% \text{ of } \pounds 220 = 220 \div 100 \times 4 = \pounds 8.80$$

Answer Mr Dale gets a larger increase.
(Total 4 marks)