

Percentage, fraction and decimal number

1) Convert the following fractions and decimal numbers into percentage.

a) 0.25

= _____

b) 0.08

= _____

c) 1.2

= _____

d) $\frac{3}{4}$

= _____

e) $\frac{2}{5}$

= _____

f) $\frac{1}{2}$

= _____

2) Convert the following percentage into fraction and write give your answer into simplest form.

a) 25%

= _____

b) 33%

= _____

c) 47.5%

= _____

d) 50%

= _____

e) 75%

= _____

f) 20%

= _____

3) Convert the following percentage into decimals.

a) 5 %

= _____

b) 26%

= _____

c) 17.5%

= _____

d) 80 %

= _____

e) 120%

= _____

f) 28%

= _____

Finding a percentage of an amount

Non-calculator method – it is easy to find 10% of an amount by dividing by 10
(10x10%=100%)

5% is half of 10%, 2.5% is half of 5%.

e.g. Find 35% of £60

$$10\% \text{ of } £60 = £60 \div 10 = £6$$

$$30\% \text{ of } £60 = 3 \times 10\% = 3 \times £6 = £18$$

$$5\% \text{ of } £60 = 10\% \div 2 = £6 \div 2 = £3$$

$$\begin{aligned} \text{so } £35\% \text{ of } £60 &= 30\% \text{ of } £60 + 5\% \text{ of } £60 \\ &= £18 + £3 = £21 \end{aligned}$$

Calculator method: write the percentage as a decimal and multiply

E.g. find 28% of £460

$$28\% \text{ of } £460 = 0.28 \times £460 = £128.80$$

Calculate the amount after percentage increase and percentage decrease.

21) Increase 245 by 25% = _____

22) Increase 145 by 12.5% = _____

23) Increase 200 by 20% = _____

24) Increase 250 by VAT% = _____

25) Increase 350 by Vat % = _____

26) Decrease 540 by 12.5% = _____

27) Decrease 300 by 48% = _____

28) Decrease 500 by 20 % = _____

29) Decrease 400 by 75 % = _____

30) Decrease 650 by 20 % = _____

VAT % = 20%

31) The price of pen is £35. And the price is increased by 20%. Find the new price.

= _____

32) The cost of a CD player is £95 plus $17\frac{1}{2}\%$. What is the total cost of the CD player?

= _____

33) Peter wants to buy motorbike , The price of motorbike is £1800, and there was 20% discount on the charismas offer, Calculate how much he have to pay after discount.

= _____

34) Andrew got 35 out of 60, how much percentage he got?

= _____

35) Complete the table

Fraction	Decimal	Percentage
$\frac{9}{100}$	0.09	
	0.15	15%
$\frac{4}{5}$		80%