

Answer 3

Percentages

1. The value of an item is worth £150 within a year it increases by 10%. What is the new value of the item?

$$10/100 = 0.1$$

$$0.1 \times 150 = 15$$

$$\text{New value: } £150 + £15 = \text{£165}$$

2. Tom wants to buy a ring for £450. The shop has a discount offer for 12% on all items. How much would he pay for the ring?

$$12/100 = 0.12$$

$$0.12 \times 450 = 54$$

$$\text{Ring cost: } £450 - £54 = \text{£396}$$

3. Sara got 60/80 in her math's exam. The pass mark is 72%. What is the percentage of 60/80? Has she passed or failed?

$$60/80 = 3/4 = 0.75$$

$$0.75 \times 100 = 75\%$$

$$\text{Percentage: } 75\% \text{ Passed!}$$

4. A classroom contains 25 students. Next year, there will be an increase of 20% of students. What will be the total number of students next year?

$$20/100 = 0.20$$

$$0.20 \times 25 = 5$$

$$\textbf{Total Students: } 25 + 5 = \textbf{30}$$

5. A chocolate box contains 8 dark chocolates and 12 milk chocolates.

What is the percentage of the dark chocolates?

$$\text{Total chocolates } 8 + 12 = 20$$

$$8/20 = 0.40$$

$$\textbf{Percentage: } 0.40 \times 100 = \textbf{40\%}$$