

INCREASING AND DECREASING QUANTITIES

Increasing a quantity makes it bigger. Decreasing a quantity makes it smaller.

Example:

Increase the number 40 by 25%.

$$100\% = 40$$

An increase means $100\% + 25\% = 125\%$

$$= (125/100) \times 40 = 50$$

Decrease 40 by 25%.

A decrease means $100\% - 25\% = 75\%$

$$= (75/100) \times 40 = 30$$

EXERCISES

1. QUESTION

Increase 60 by 30%.

Working:

$$100\% = 60$$

Increase by 30% = _____ + _____ =

Answer=_____

2. QUESTION

Decrease 75 by 20%.

Working:

$$100\% = 75$$

$$\text{Decrease by } 20\% = \underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$$

3. QUESTION

Increase \$37.25 by 15%

Give your final answer as a whole number.

$$\text{Answer} = \underline{\hspace{2cm}}$$

4. QUESTION

Increase 1 km by 46%.

$$\text{Answer} = \underline{\hspace{2cm}}$$

5. QUESTION

Decrease 139 grams by 42%.

6. QUESTION

Decrease 456.20 by 50%'

$$\text{Answer} = \underline{\hspace{2cm}}$$

7. QUESTION

Decrease 400 by 25%.

Answer = _____

8. QUESTION

Increase 790 by 24%'

Answer = _____

9. QUESTION

Increase 900 by 20%'

Answer = _____

10. QUESTION

Decrease 680 by 40%'

Answer = _____

11. QUESTION

Decrease 90 by 15%'

Answer = _____

12. QUESTION

Increase 1000 by 80%'

Answer = _____