

Q1

(a) Find the missing terms:

i. 2, 6, 18, 54,

~~2 x 6~~ By Multiplying with 3

Ans

$$2 \times 3 = 6$$

$$6 \times 3 = 18$$

$$18 \times 3 = 54$$

$$54 \times 3 = 162 \quad \text{Ans}$$

ii- 3125, 256, 27, 4, 1.

By taking ~~ones~~

$$5^5 = 3125$$

$$4^4 = 256$$

$$3^3 = 27$$

$$2^2 = 4$$

$$1^1 = 1 \quad \text{Ans}$$

$$\sqrt{x} = \sqrt{64}$$

$$x = 8$$

By Putting the value in eq(i)

$$x : 5x$$

$$8 : 5(8)$$

$$8 : 40$$

Difference of Squares
of two numbers

$$= (40)^2 - (8)^2$$

$$= 1600 - 64 = 1536 \text{ Ans}$$

4. Mean of 10, 30, Y, and 50 is 50
 What is value of Y?

Ans. $10, 30, y, 50$
 $\frac{10+30+50+y}{4}$

Mean = 50
 value of Y = ?

$$50 = \frac{10+30+50+y}{4}$$

$$50 = \frac{90+y}{4}$$

$$200 = 90+y$$

$$200 - 90 = y$$

$$110 = y$$

$$y = 110$$

$$\frac{0}{9550}$$

$$\begin{array}{r} 10, 30 \\ 90+y \\ \hline 90+y \\ 50 \\ \hline 50 = 90+y \\ 10 = 90+y \\ 50+40 = 140 \\ \hline 90+y \\ \hline 50 = 90+y \\ 50-90 = y \\ -40 = y \\ \hline 10, 30+8+5 \\ 5 \overline{)108} \\ 10 \cancel{0} \\ \hline 8 \\ \hline 5 \\ \hline 90 \\ 50+ \\ 90+30 \\ 5 \overline{)120} \\ 90+ \\ 150 \\ 90 \\ 50 = \frac{18}{4} y \\ 50 = 5y \\ 18 \end{array}$$