

Question no 7

a)

Price added = 20%
to shirt

Original price = x

New price = 80 RS

$$80 = x + 20\% \cdot x$$

$$80 = x + \frac{20}{100}x$$

$$80 = x + \frac{1}{5}x$$

$$80 = \frac{5x + x}{5} = \frac{6x}{5}$$

$$80 = \frac{6x}{5}$$

$$80 \times 5 = 6x$$

$$6x = 400$$

$$x = \frac{400}{6} = 66.7 \text{ Ans}$$

c)

$${}^n C_r = \frac{n!}{r!(n-r)!}$$

$${}^8 C_3 = \frac{8!}{3!(8-3)!}$$

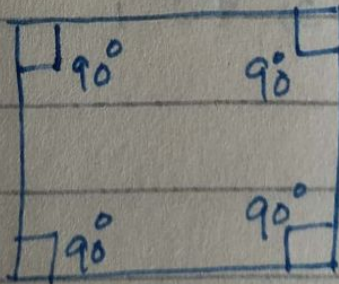
$${}^8 C_3 =$$

$$\begin{aligned}
 {}^8C_3 &= \frac{8 \times 7 \times 6 \times 5 \times 4 \times 3!}{3! \times 5} \\
 &= \frac{8 \times 7 \times 6 \times 5 \times 4}{5} \\
 &= \frac{6720}{5} \\
 &= 1344 \text{ Ans}
 \end{aligned}$$

c)

Equilateral Triangle

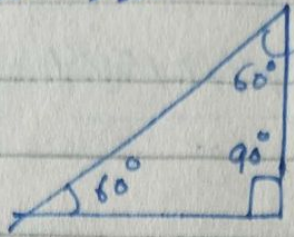
A Triangle in which all angles are equal to each other.



Salene Triangle

A Triangle in which two angles are great^r & small^r & greater than 90°.

iii) triangle which is isosceles and right at the same time.



Isosceles triangle

Question no 6

a) Identify series

$$10, 100, 200, 310, \underline{430}$$

$100-10=90$ $200-100=100$ $310-200=110$ $430-310=120$

$$3, 7, 23, 95, \underline{\quad}$$

b)

Solution

$$\text{Perimeter} = \frac{1}{2} \times 2x ?$$

$$= (3x - y) \text{ cm} + (2x - 3) \text{ cm} + (2x + y) \text{ cm}$$

$$= 3x - y + 2x - 3 + 2x + y$$

$$= 5x + 2x - 3 \Rightarrow 7x - 3 \Rightarrow 7x$$

$$7x = 3$$

$$x = \frac{3}{7}$$

$$15+x \rightarrow 5$$
$$x = 1$$

c)

$$\text{Nisha age} = x$$

$$\text{Nisha Older than Romi} = 15+x$$

$$\text{Romi age} = y$$

$$(15+x) = \cancel{y}(3+x)$$

$$15+x-3-x = \cancel{y}$$

$$12 = y$$

$$x = 12$$

~~Nisha~~

$$\text{Nisha current age} = 15+12$$

$$= \underline{27 \text{ Ans}}$$