

I. Answer the questions:

1. Solve: i) $\frac{5}{7} + x = \frac{19}{7}$

$$x = \frac{19}{7} - \frac{5}{7}$$

$$x = \frac{19-5}{7} = \frac{14}{7_1}$$

$$= x = 2$$

2. $9x - 5 = 9 + 7x$

$$9x - 7x = 9 + 5$$

$$2x = 14$$

$$x = \frac{14^7}{2_1}$$

$$x = 7$$

ii) $\frac{y}{6} = 8$

$$= \frac{y}{6} = \frac{8}{1}$$

$$y = 48$$

Also,

Verification:

$$9(7) - 5 = 9 + 7(7)$$

$$63 - 5 = 9 + 49$$

$$58 = 58$$

∴ L.H.S = R. H. S

3. Let, the 3 consecutive integers are $x, x + 1$ & $x + 2$.

By given,

$$x + x + 1 + x + 2 = 66$$

$$3x + 3 = 66$$

$$3x = 66 - 3$$

$$3x = 63$$

$$x = \frac{63^{\cancel{21}}}{3_1} = \boxed{x = 21}$$

∴ The integers are 21, 22 & 23.

4. $3y + \frac{1}{2} = \frac{3}{8} + y$

$$3y - y = \frac{3}{8} - \frac{1 \times 4}{2 \times 4}$$

$$2y = \frac{3-4}{8}$$

$$2y = \frac{-1}{8}$$

$$y = \frac{-1}{2 \times 8} = y = \frac{-1}{16}$$

5. Let, present age of Ragavi = x yrs

After 10 yrs,

Ragavi's age = $(x + 10)$ yrs

By given, $6x = x + 10$

$$6x - x = 10 \Rightarrow 5x = 10 \Rightarrow x = \frac{10^2}{5_1} = x = 2$$

Present age of Ragavi = 2 yrs

II. Answer in one word:

6. Linear equation in one variable

7. $x + y = 9$

8. Equation

9. $x = 15$

10. False