

I. Answer the given questions:

1. a) $2x - x = 2 + 3$

$$x = 5$$

b) $5y - 3y = \frac{8}{5}$

$$2y = \frac{-8}{5} \quad y = \frac{-8}{5 \times 2}$$

$$y = \left(\frac{-4}{5} \right)$$

2. $\frac{2-x}{x-5} = \frac{-3}{7}$

$$7(2-x) = -3(x-5)$$

$$14 - 7x = -3x + 15$$

$$-7x + 3x = 15 - 14$$

$$-4x = 1$$

$$x = \frac{-1}{4}$$

3. $\frac{x}{4} - 19 = \frac{x}{2} + 25$

$$\frac{x}{4} - \frac{x}{2} = 25 + 19$$

$$\frac{x-2x}{4} = 44$$

$$x - 2x = 44 \times 4$$

$$-x = 176$$

$$x = (-176)$$

4. Let Anu's present age = $4x$

Raj's present age = $5x$

After 10 yrs it will be $\rightarrow 4x + 10, 5x + 10$

Given $\frac{4x+10}{5x+10} = \frac{5}{6}$

$$6(4x + 10) = 5(5x + 10)$$

$$24x + 60 = 25x + 50$$

$$60 - 50 = 25x - 24x$$

$$10 = x$$