

1. 4 people can paint a fence in 3 hours. How long will it take for 6 people to paint it.

$$4p \times 3hrs = 6p \times x$$

$$12 = 6x$$

$$\frac{12}{6} = x$$

$$\therefore x = 2 \text{ hours}$$

$\therefore$ it will take 2 hours for 6 people to paint the fence

2. 6 printers have printed 100 books in 4 days. How many days will it take to print 50 if we have 4 printers?

6 printers printed 100 books in 4 days

So ~~1~~ 1 printer 100 books in 4 days

$$\therefore \text{In 1 day} = \frac{100 \cdot 6}{4} = 15 \text{ books}$$

we have 4 printers $\Rightarrow 4 \times 15 = 60$ books in 1 day

$$\frac{100}{60} \times 1 \text{ day} = \frac{50}{30} = 1.66 \approx 2 \text{ days}$$

2 days are required to print 50 books with 4 printers

3. 15 robots can make a train in 6 days working 5 hrs a day. In how many days will 25 robots, working 6 hours a day complete the same work.

$$15 \times 6 \times 5 = 450$$

$$450 = 25 \times 6 \times x$$

$$\frac{450}{150} \times x \quad , \quad x = \underline{3 \text{ days}}$$

So it will take 3 days for 25 robots working 6 hrs a day to complete the work.

4] what must be added to each term of ratio 2:3 so that it may become equal to 4:5?

$$\Rightarrow \frac{2}{3} + \frac{x}{x} = \frac{4}{5}$$

$$(2+x)5 = 4(3+x)$$

$$10 + 5x = 12 + 4x$$

$$5x - 4x = 12 - 10$$

$$x = 2$$

$\therefore 2$ must be added

5] Shreyas brought an article and sold for 150% of its cost price. What was the cost price of the article, if Shreyas sold it for ₹750

$$SP = CP + P$$

$$150 = 100 + 50$$

$$750 \times ?$$

$$= ₹500$$

$\therefore$ Cost price of article is ₹500