

The ages of Sonal and Manoj are in the ratio 7 : 5. Ten years hence, the ratio of their ages will be 9 : 7. Find their present ages.

### ANSWER:

Given ratio of Sonal's and Manoj's ages  
= 7 : 5

Let the ages of Sonal and Manoj be  $7x$  yrs  
and  $5x$  yrs.

According to the question, we have :

$$\frac{7x+10}{5x+10} = \frac{9}{7}$$

$$\Rightarrow 7(7x + 10) = 9(5x + 10)$$

$$\Rightarrow 49x + 70 = 45x + 90$$

$$\Rightarrow 49x - 45x = 90 - 70$$

$$\Rightarrow 4x = 20$$

$$\Rightarrow x = 5$$

$\therefore$  Sonal's present age is  $7 \times 5 = 35$  yrs

Manoj's present age is  $5 \times 5 = 25$  yrs