

Day 3

27/03/2024

1. Anil and Bhaskar can do a piece of work individually in 12 days respectively. They work together for 6 days before Anil decides to leave. How many days will it take Bhaskar to complete the work on his own?

A) 4 B) 14 C) 6 D) 3

Solution:

Anil - x Bhaskar - y Anil + Bhaskar = 6 days

$$x = \frac{1}{12} \quad y = \frac{1}{20}$$

$$x + y = \frac{1}{12} + \frac{1}{20} = \frac{5+3}{60} = \frac{8}{60} = \frac{2}{15}$$

In 6 days $(\frac{2}{15} \times 6) \Rightarrow \frac{12}{15}$

$$1 - \frac{12}{15} \Rightarrow \frac{3}{15} = \frac{1}{5}$$

work done by Bhaskar = $\frac{2}{15} \times \frac{1}{\frac{1}{20}} = 4$ days

option : A) 4

2. Dilip and Samrat can do a piece of work in 16 days and 24 days respectively. Samrat works alone for 15 days and leaves. In how many days can Dilip complete the remaining work?

A) 8 B) 10 C) 6 D) 7

$$A = \frac{1}{16} \quad B = \frac{1}{24}$$

$$15 \times \frac{1}{24} = \frac{15}{24} = \frac{5}{8}$$

Remaining work = $1 - \frac{5}{8} = \frac{3}{8}$

$$\frac{3}{8} \times 16 = \frac{48}{8} = 6 \text{ days}$$

Ans: option C) 6 days