07/04/24

1. A can do a piece of work in 9 days & B in 18 days. They begin together, but A goes away three days before the work is finished. The work lasts for

soln:

1d work of A ⇒ 1/9

1d work of B ⇒ 1/18

Together (1d work) = $\frac{1}{9} + \frac{1}{18} \rightarrow \frac{2+1}{18} \Rightarrow \boxed{\frac{1}{6}}$

In 6 days, they complete the work.

So A leaves after 3 days. [already 3 days]

then remaining work = $\frac{3}{6}\left[1 - \frac{3}{6}\right]$

1d work of y ⇒ $\frac{1}{18} \times x \Rightarrow \frac{3}{6}$

Days

$\boxed{x \Rightarrow 9 \text{ days}}$

∴ 9+3 ⇒ $\boxed{12 \text{ days}}$

1.

	M	N
Days to complete :	5	9
Efficiency :	9	5

∴ N gets ⇒ $5/14 \times 1200$

⇒ $\boxed{₹1500}$