

Charlie can paint a room in 6 hours. Brandy can paint the same room in 4 hours. How long will it take both of them working together to paint two rooms?

	<i>Task Rate</i>	<i>Time</i>	<i>Task</i>
Charlie	$\frac{1}{6}$	<i>t hours</i>	
Brandy	$\frac{1}{4}$	<i>t hours</i>	

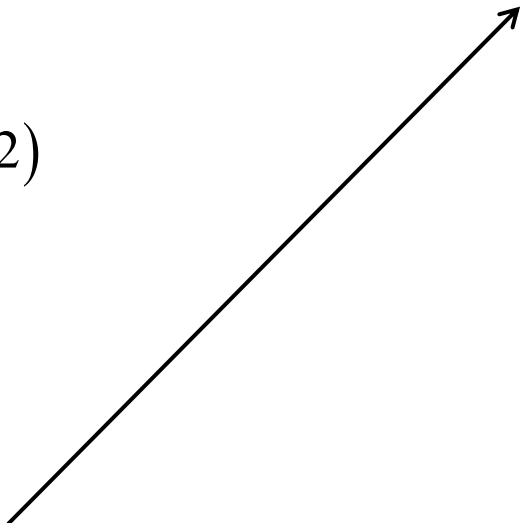
$$\frac{t}{6} + \frac{t}{4} = 2 \quad LCD = 12$$

$$5t = 24$$

$$\left(\frac{t}{6} + \frac{t}{4}\right) = (2)$$

$$\left(\frac{t}{6}\right) + \left(\frac{t}{4}\right) = 24$$

$$+ \quad = 24$$



Pump #1 can drain a pool in 10 hours. Pump #2 can drain a pool in 15 hours. How long will it take both of them working together to drain two-thirds of the pool?

Pump #1			
Pump #2			

$\frac{2}{3}$ pool

$$\frac{t}{10} + \frac{t}{15} = \frac{2}{3}$$

$$LCD = 30$$

$$5t = 20$$

$$\left(\frac{t}{10} + \frac{t}{15}\right) = \left(\frac{2}{3}\right)$$

$$\left(\frac{t}{10}\right) + \left(\frac{t}{15}\right) =$$

$$3t + 2t =$$

