

8. Time taken by Michael to finish work =  $\frac{7}{12}$  hr

Time taken by Vaibhav to finish work =  $\frac{3}{4}$  hr

$$= \frac{3 \times 3}{4 \times 3}$$

$$= \frac{9}{12} \text{ hr}$$

Vaibhav worked longer by

$$= \frac{9}{12} - \frac{7}{12}$$

$$= \frac{\cancel{2}^1}{\cancel{12}_6}$$

$$= \frac{1}{6} \text{ hour}$$