

$$6. \quad \text{time}_{\text{up}} = \text{time}_{\text{down}}$$

$$t = \frac{d}{v}$$

$$a) \quad \frac{8}{v-6} = \frac{12}{v+6}$$

$$30 - 6 = 24 \text{ km/h}$$

$$b) \quad \begin{aligned} 8v + 48 &= 12v - 72 \\ 120 &= 4v \\ 30 &= v \end{aligned}$$

$$\frac{18}{24} = 0.75 \text{ hrs}$$

↓
45 min

$$3. \quad \text{time}_1 = \text{time}_2$$

$$\frac{1800}{v} = \frac{1800 \times 1.6}{v + 50}$$

5.

$$\cancel{264} \text{ km} = \cancel{264} \frac{\text{km}}{\cancel{1.0} \text{ hr}} + \frac{18 \cancel{\text{km}}}{60 \text{ hr}}$$

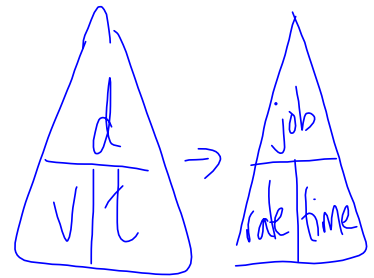
$$264 = 240 + 0.3 \text{ hr}$$

$$8 \quad \frac{21}{30} + \frac{38}{50} + \frac{15}{x} + \frac{29}{40} = .64$$

4

pg. 348-351
7-19, 26

"Sharing a Job" Problems



Pg. 345 Ex 3)

Sheena 40mins } What are their "speeds"?
Jeff 50mins }

Sheena $\frac{1 \text{ job}}{40 \text{ mins}}$

$$\frac{1}{40}t + \frac{1}{50}t = 1$$

Jeff $\frac{1 \text{ job}}{50 \text{ mins}}$

$$\cancel{40} \times \frac{t \times 50}{40} + \frac{t \times 40 \times \cancel{50}}{50} = 1 \times 40 \times 50$$

$$50t + 40t = 2000$$

$$\frac{90t}{90} = \frac{2000}{90}$$

$$t = 22.2 \text{ mins}$$

Pg. 345 Your Turn

It will take them 1 hr 43 mins.