

(i) start w/ $612.50 = C$

$$P = C - rC$$

$$(612.5) - (.4)(612.5)$$

$$\text{\$ } 367.50$$

$$137.50 = C$$

$$P = C - rC$$

$$(137.5) - (.4)(137.5)$$

$$\text{\$ } 82.5$$

(j) 300 mi/hr for 2 hours

$$d = r t$$

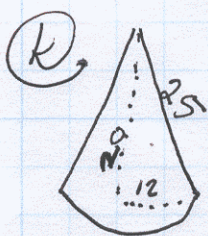
$$d = (300)(2)$$

$$600 \text{ miles}$$

10 ft/minute 7 minutes

$$d = (10)(7)$$

$$70 \text{ ft}$$



$$SA = \pi r^2 + \pi r s$$

$$\pi(12)^2 + \pi(12)(25)$$

$$144\pi + 300\pi$$

$$444\pi$$

$$\approx 1394.87 \text{ cm}^2$$

$$V = \frac{1}{3} \pi r^2 h$$

$$\frac{1}{3} \pi (12)^2 (20)$$

$$\frac{1}{3} \pi 144 (20)$$

$$960\pi \approx 3015.9 \text{ cm}^3$$

(l) 52 weeks per year

$$A = P \left(1 + \frac{r}{m}\right)^{m t}$$

\swarrow $8\% = .08$

$$(800) \left(1 + \frac{(.08)}{52}\right)^{(52)(5)}$$

$$800 (1.0015...)^{260}$$

$$\text{\$ } 1193.09$$

semiannually $2 = m$

$$(100) \left(1 + \frac{(.12)}{2}\right)^{(2)(15)}$$

$$(100) (1.06)^{30}$$

$$\text{\$ } 574.35$$

(m) $P = C + rC$

$$(50) + (.75)(50)$$

$$\text{\$ } 137.50$$

$$P = C - rC$$

$$(137.50) - (.3)(137.50)$$

$$\text{\$ } 96.25$$