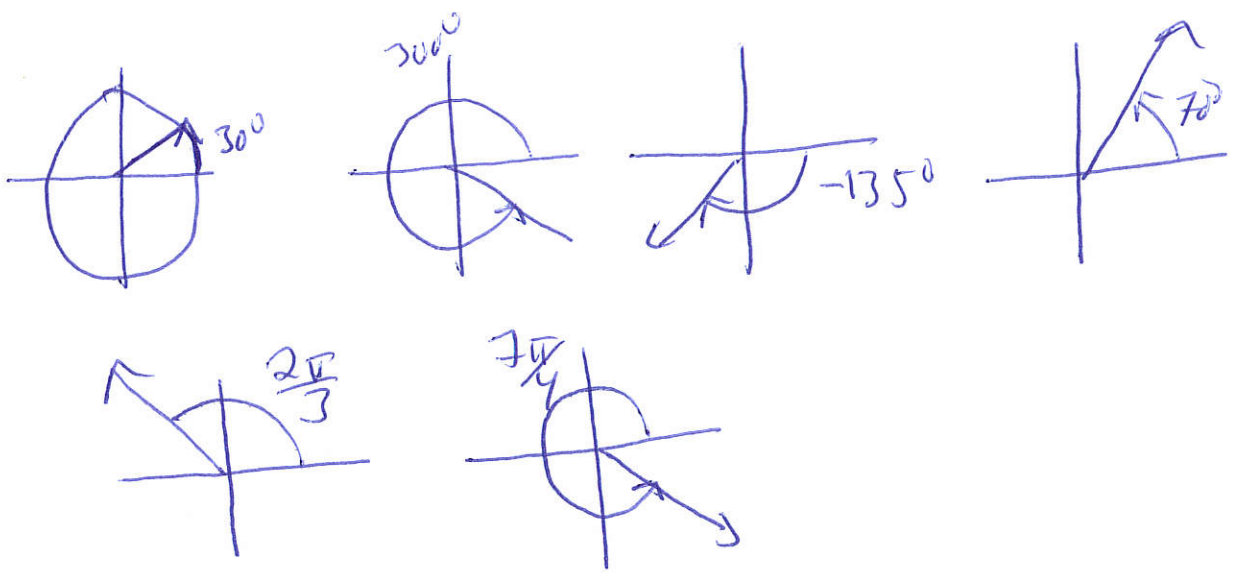


(1)



(3)

$$180^\circ = \pi \text{ radians}$$

(5)

$$\frac{5\pi 180}{6 \pi} = 150^\circ$$

(4)

$$30^\circ = \frac{\pi}{6} \text{ radians}$$

(6)

$$\frac{11\pi}{6} = \frac{180}{\pi} \cdot \frac{30}{\pi} = 330^\circ$$

(7)

$$\begin{array}{r} 685 \\ -360 \\ \hline 325 \end{array}$$

$$325^\circ$$

(9)

$$\begin{array}{r} 1746 \\ 1440 \\ \hline -306 \end{array}$$

(8)

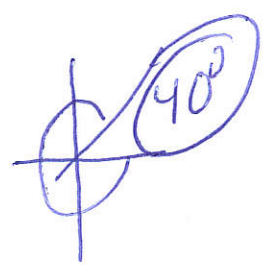
$$\begin{array}{r} 451 \\ -360 \\ \hline 91^\circ \end{array}$$

$$\begin{array}{r} 360 \\ -306 \\ \hline 54^\circ \end{array}$$

(10)

$$\begin{array}{r} -1400 \\ 1080 \\ \hline -320 \end{array}$$

3(360)



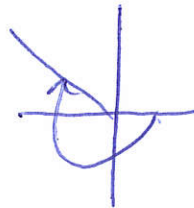
$$(11) \quad \frac{26\pi}{9} - \frac{18\pi}{9} = \boxed{\frac{8\pi}{9}}$$

$$(12) \quad \frac{17\pi}{3} - \left(\frac{6\pi}{3}\right)^2$$

$$\frac{17\pi}{3} - \frac{12\pi}{3} = \boxed{\frac{5\pi}{3}}$$

$$(13) \quad \text{Diagram} \quad \left(\frac{\pi}{2}\right)$$

(14)



$$2\pi - \frac{7\pi}{6}$$

$$\frac{12\pi}{6} - \frac{7\pi}{6}$$

$$\boxed{\frac{5\pi}{6}}$$

$$(15) \quad S = 5(7) = \boxed{35 \text{ miles}}$$

$$(16) \quad \boxed{6 \text{ ft}}$$

$$(17) \quad \frac{2}{120} \times \frac{\pi}{180} \quad \frac{2\pi}{3}(12) = \boxed{8 \pi \text{ cm}}$$

$$(18) \quad \frac{5}{66} = \frac{1}{12} \cdot \frac{\pi}{180} \cdot 3960 \rightarrow \boxed{5.76 \text{ miles}}$$

(11)

~~10~~ (17) $s = \theta(t)$ $\theta = \frac{1}{2} \text{ radian}$

(20) $\frac{1}{2} \theta r^2$ $\frac{1}{2} \left(\frac{\pi}{4}\right) 36 = \frac{9\pi}{2} \text{ sq. cm}$

(21) $\frac{32 \text{ in}}{1 \text{ Dia}}$ $\frac{2 \text{ rad}}$

$\frac{60 \text{ rev}}{1 \text{ hr}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{12 \text{ in}}{1 \text{ ft}} \cdot \frac{1 \text{ rev}}{32 \pi \text{ in}}$

$\frac{630.254 \text{ rev}}{1 \text{ min}} \cdot \frac{32 \pi \text{ in}}{1 \text{ rev}} = \frac{630.254 \text{ rev}}{\text{min}}$

(22)

$\frac{63360 \text{ in}}{1 \text{ hr}}$

~~320~~ $\frac{630.254 \text{ rev}}{1 \text{ min}} \cdot \frac{2\pi \text{ rad}}{1 \text{ rev}} = \frac{3960 \text{ rad}}{\text{min}}$

(23)

$\frac{200 \text{ rev}}{1 \text{ min}} \cdot \frac{2\pi \text{ rad}}{1 \text{ rev}} \cdot \frac{60 \text{ mm}}{1 \text{ in}}$

$\frac{75398.224 \text{ mm}}{\text{min}}$

24

$$\frac{2\pi(3960)\text{miles}}{1\text{day}}$$

$$\cdot \frac{1\text{day}}{24\text{hrs}}$$

$$\frac{1036.726\text{miles}}{1\text{hr}}$$

$$\frac{2\pi r \text{ rad}}{1\text{day}}$$

$$\cdot \frac{1\text{day}}{24\text{hrs}}$$

$$\frac{.2618\text{ rad}}{1\text{hr}}$$