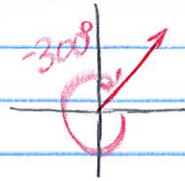


pg. 715 # 1-27 Leave answers in radian, not degree

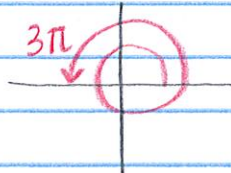
1.

-300°



$$-\frac{5\pi}{3} \text{ and } -5.24$$

7.



$$\begin{array}{r} 360 \\ +180 \\ \hline 540^\circ \end{array}$$

13. Try without Yellow Unit Circle, then reference it as necessary.

14. $\frac{\pi}{6}$ QI (+, +) $(\frac{\sqrt{3}}{2}, \frac{1}{2})$

20.

$$C = 2\pi = 2\pi r \quad \text{full revolution}$$

$$S = \frac{\theta}{2\pi} = \frac{\theta}{2\pi} \cdot 2\pi r = \theta r \quad \text{part of full revolution}$$

$$S = \frac{\pi}{3} \cdot 3\text{cm} = \pi = 3.1$$

26.

$$C \text{ for } 360^\circ = 2\pi r$$

$$S \text{ for partial} = \frac{\theta}{360} (2\pi r)$$

$$S = \frac{255}{360} (2\pi \cdot 24)$$

$$= 106.8 \text{ in}$$

27.

$$C \text{ for } 2\pi = 2\pi r$$

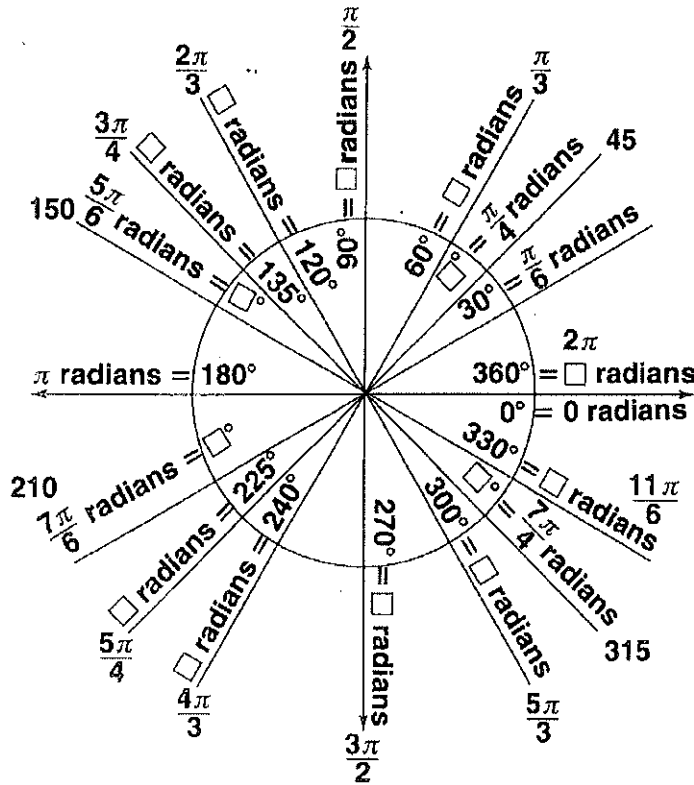
$$S \text{ for partial} = \frac{\theta}{2\pi}$$

$$S = \frac{1.45}{2\pi} (2\pi r) = 1.45(22) = 31.9 \text{ ft.}$$

Answers for Lesson 13-3, pp. 715–719 Exercises

- ① $-\frac{5\pi}{3}, -5.24$ ② $\frac{5\pi}{6}, 2.62$ ③ $-\frac{\pi}{2}, -1.57$
 ④ $-\frac{\pi}{3}, -1.05$ ⑤ $\frac{8\pi}{9}, 2.79$ ⑥ $\frac{\pi}{9}, 0.35$
 ⑦ 540° ⑧ 198° ⑨ -120°
 ⑩ -172° ⑪ 90° ⑫ 270°

⑬



- ⑭ $\frac{\sqrt{3}}{2}, \frac{1}{2}$ ⑮ $\frac{1}{2}, \frac{\sqrt{3}}{2}$ ⑯ 0, 1
 ⑰ $-\frac{1}{2}, \frac{\sqrt{3}}{2}$ ⑱ $-\frac{\sqrt{3}}{2}, \frac{1}{2}$ ⑲ 0, -1
 ⑳ 3.1 cm ㉑ 10.5 m ㉒ 51.8 ft
 ㉓ 25.1 in. ㉔ 4.7 m ㉕ 43.2 cm
 ㉖ ≈ 107 in. ㉗ ≈ 32 ft

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