

Homework: Unit Circle Foundations

p. 365 #13-19 odd and p. 395 #17-29 odd

p. 365 13.

135°



b) 45°

c) -275° and 495°

d) $135 \cdot \frac{\pi}{180} = \frac{3\pi}{4}$

15. 450°



b) 90°

c) -270°, 90°, 810°

d) $450 \cdot \frac{\pi}{180} = \frac{5\pi}{2}$

17. $\frac{3\pi}{4}$



b) $\frac{\pi}{4}$

c) $\frac{11\pi}{4}, -\frac{5\pi}{4}$

d) $\frac{3\pi}{4} \cdot \frac{180}{\pi} = 135^\circ$

19. $-\frac{\pi}{6}$



b) $\frac{\pi}{6}$

c) $\frac{13\pi}{6}, -\frac{11\pi}{6}$

d) $-\frac{\pi}{6} \cdot \frac{180}{\pi} = -30^\circ$

p. 395 17.

$\cot 390^\circ$

$= \cot 30^\circ$

$\frac{\sqrt{3}}{\frac{1}{2}} = \sqrt{3}$

19. $\cos \frac{33\pi}{4}$

$\frac{\sqrt{2}}{2}$

$= \cos \frac{\pi}{4}$

21. $\tan(21\pi)$

$= \tan(\pi)$

$\frac{0}{-1} = 0$

23. $\sec \frac{11\pi}{4}$

$\frac{2}{\frac{1}{\sqrt{2}}} = \frac{2\sqrt{2}}{1} = \sqrt{2}$

25. $\tan \frac{19\pi}{6}$

$= \tan \frac{7\pi}{6}$

$\frac{\frac{1}{2}}{-\frac{\sqrt{3}}{2}} = -\frac{1}{\sqrt{3}} = -\frac{\sqrt{3}}{3}$

27. $\sin \theta > 0, \cos \theta < 0$



29. $\sin \theta < 0, \tan \theta < 0$

