

## Section 7.4

$$1 \quad \begin{aligned} \sin 160^\circ &= \sin(160^\circ) = 0.34202 \\ &= 0.3420 \end{aligned}$$

$$2 \quad \begin{aligned} \cos 205^\circ &= \cos(205^\circ) = -0.90630 \\ &= -0.9063 \\ &= -0.9063 \end{aligned}$$

$$3 \quad \begin{aligned} \cos 312^\circ &= \cos(312^\circ) = 0.66913 \\ &= 0.6691 \end{aligned}$$

$$4 \quad \begin{aligned} \sin 132^\circ &= \sin(132^\circ) = 0.7431 \\ &= 0.7431 \end{aligned}$$

$$5 \quad \begin{aligned} \cos 224^\circ &= \cos(180^\circ - 224^\circ) \\ &= -\cos 44^\circ \end{aligned}$$

$$6 \quad \begin{aligned} \sin 145^\circ &= \sin(180^\circ - 145^\circ) \\ &= \sin 35^\circ \end{aligned}$$

$$7 \quad \begin{aligned} \sin 320^\circ &= \sin(320^\circ - 180^\circ) \\ &= \sin 140^\circ \end{aligned}$$

$$8 \quad \begin{aligned} \cos 170^\circ &= \cos(180^\circ - 170^\circ) \\ &= -\cos 10^\circ \end{aligned}$$

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$$9 \quad \cos 150^\circ = \cos(150^\circ) = -0.86602540 \\ = -\frac{\sqrt{3}}{2}$$

$$10 \quad \sin(-240^\circ) = \sin(-240^\circ) = \frac{\sqrt{3}}{2} \\ = \frac{\sqrt{3}}{2}$$

$$11 \quad \sin 315 = \frac{-\sqrt{2}}{2} = -0.70710 \\ = -\frac{\sqrt{2}}{2}$$

$$12 \quad \cos(-30^\circ) = \cos(30^\circ) \\ \cos 30 = 0.86602 \\ = \frac{\sqrt{3}}{2}$$

$$13 \quad \sin \frac{\pi}{4} = 0.70710 \\ = \frac{\sqrt{2}}{2}$$

$$14 \quad \cos\left(-\frac{5\pi}{6}\right) = -0.86602 = \cos\left(\frac{5\pi}{6}\right) \\ = -\frac{\sqrt{3}}{2}$$

$$15 \quad \sin \frac{3\pi}{4} = \cos\left(\frac{\pi}{2} - \frac{3\pi}{4}\right) = \frac{\sqrt{2}}{2}$$

$$16 \quad \cos \frac{\pi}{6} = -\frac{\pi}{6} \cos x = \cos\left(\frac{\pi}{6}\right) = \frac{\sqrt{3}}{2}$$