

a. $\sin\left(\frac{\pi}{3}\right) = \frac{\sqrt{3}}{2}$

b. $\cos\left(\frac{2\pi}{3}\right) = -\frac{1}{2}$

-

c. $\tan\left(\frac{5\pi}{6}\right) = \frac{1}{\sqrt{3}}$

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

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

$\frac{1}{2}$

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

d. $\sin\left(\frac{7\pi}{4}\right) = -\frac{\sqrt{2}}{2}$

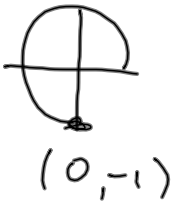


e. $\cos\left(-\frac{4\pi}{3}\right) = -\frac{1}{2}$

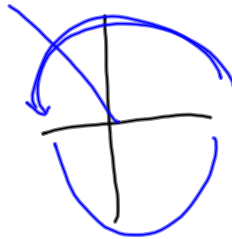


f. $\csc\left(\frac{\pi}{6}\right) = \frac{1}{\sin\frac{\pi}{6}} = 2$

g. $\cot\left(\frac{3\pi}{2}\right) = 0$



h. $\tan\left(\frac{11\pi}{4}\right) = -1$



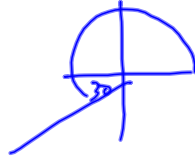
i. $\cos(300^\circ) =$

$\frac{1}{2}$

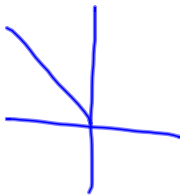


j. $\csc(210^\circ) =$

$\frac{1}{\sin(210)} = -2$

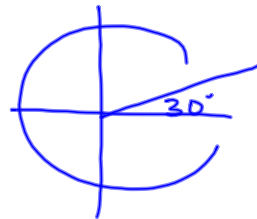


k. $\cot(135^\circ) = -1$



l. $\sin(-330^\circ) =$

$\frac{1}{2}$



a) $\sin \theta \cdot \csc \theta$

$$\sin \theta \cdot \frac{1}{\sin \theta} = 1$$

b) $\frac{1 - \cos^2 \theta}{\sin \theta} = \frac{\sin^2 \theta}{\sin \theta} = \sin \theta$

$$c) \quad \underline{\csc^2 \theta} (\underline{1 - \cos^2 \theta}) =$$

$$\frac{1}{\cancel{\sin^2 \theta}} (\cancel{\sin^2 \theta}) = 1$$

$$d) \quad \frac{\sin \theta \cos \theta}{1 - \cos^2 \theta} = \frac{\cancel{\sin \theta} \cos \theta}{\sin^2 \theta}$$

$$\frac{\cos \theta}{\sin \theta}$$

$$\cot \theta$$

e) $(1 - \sin \theta)(1 + \sin \theta)$

$$1 + 1 \cancel{\sin \theta} - 1 \cancel{\sin \theta} - \sin^2 \theta$$

$$1 - \sin^2 \theta$$

$$\cos^2 \theta$$

f) $\cot \theta \cdot \sec \theta \cdot \sin \theta$

$$\frac{\cancel{\cos \theta}}{\cancel{\sin \theta}} \cdot \frac{1}{\cancel{\cos \theta}} \cdot \cancel{\sin \theta}$$

$$1$$

g) $\sin \theta (\csc \theta - \sin \theta)$

$$\sin \theta \left(\frac{1}{\sin \theta} - \sin \theta \right)$$

$$\frac{\sin \theta}{\sin \theta} - \sin^2 \theta$$

$$1 - \sin^2 \theta$$

$$\cos^2 \theta$$

h) $\cos^2 \theta (\sec^2 \theta - 1)$

$$\cos^2 \theta \left(\frac{1}{\cos^2 \theta} - 1 \right)$$

$$\frac{\cos^2 \theta}{\cos^2 \theta} - \cos^2 \theta$$

$$1 - \cos^2 \theta$$

$$\sin^2 \theta$$