

1. Determine the trig ratios exactly:

(1 mark each)

a) $\cos\left(\frac{11\pi}{6}\right) = +\frac{\sqrt{3}}{2}$

b) $\sin\left(\frac{13\pi}{4}\right) = -\frac{1}{\sqrt{2}}$

c) $\csc\left(\frac{5\pi}{3}\right) = \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$

d) $\tan(\pi) = 0$

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

d) $\sin\left(-\frac{4\pi}{3}\right) = +\frac{\sqrt{3}}{2}$

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

