

2. (a)  $\sin \pi = 0$  (b)  $\cos \pi = -1$
4. (a)  $\cos \frac{\pi}{6} = \frac{\sqrt{3}}{2}$  (b)  $\cos \frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$
6. (a)  $\sin \frac{7\pi}{6} = -\frac{1}{2}$  (b)  $\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$
8. (a)  $\sin \frac{5\pi}{6} = \frac{1}{2}$  (b)  $\sec \frac{5\pi}{6} = -\frac{2}{\sqrt{3}}$
10. (a)  $\sin \frac{3\pi}{4} = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$  (b)  $\cos \frac{3\pi}{4} = -\frac{1}{\sqrt{2}} = -\frac{\sqrt{2}}{2}$
12. (a)  $\sin \frac{\pi}{6} = \frac{1}{2}$  (b)  $\sin(-\frac{\pi}{6}) = -\frac{1}{2}$
14. (a)  $\tan \frac{\pi}{3} = \sqrt{3}$  (b)  $\cot \frac{\pi}{3} = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
16. (a)  $\sec \frac{13\pi}{6} = \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$  (b)  $\sec(-\frac{13\pi}{6}) = \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$
18. (a)  $\sec \pi = -1$  (b)  $\csc \frac{\pi}{2} = 1$
20. (a)  $\tan \frac{3\pi}{4} = -1$  (b)  $\tan \frac{11\pi}{4} = -1$
22.  $t = \frac{\pi}{2} \Rightarrow \sin t = 1, \cos t = 0, \csc t = 1, \cot t = 0, \tan t$  and  $\sec t$  are undefined.
24.  $t = \frac{3\pi}{2} \Rightarrow \sin t = -1, \cos t = 0, \csc t = -1, \cot t = 0, \tan t$  and  $\sec t$  are undefined.