1. Determine the *exact* values (i.e. no decimal approximations)

   a. $\sin\left(\frac{\pi}{3}\right)$ c. $\cos\left(\frac{2\pi}{3}\right)$ e. $\sin\left(\frac{3\pi}{2}\right)$

   b. $\sin\left(\frac{2\pi}{3}\right)$ d. $\cos\left(\frac{7\pi}{6}\right)$ f. $\tan\left(-\frac{\pi}{4}\right)$

2. Graph $y = \sin(x)$ and $y = \cos(x)$ on the interval $[0, 2\pi]$
   (a) Where is $\sin(x)$ positive? Negative? Increasing? Decreasing?
   (b) Where is $\cos(x)$ positive? Negative? Increasing? Decreasing?

3. (a) Find a value of a where $\cos(x) = \sin(x + a)$
   (b) Find a value of a where $-\sin(x) = \cos(x + a)$