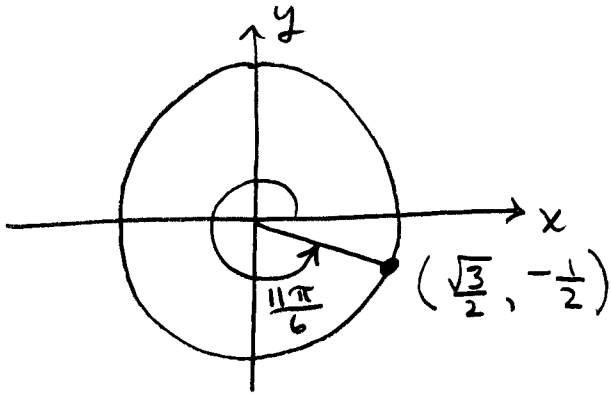


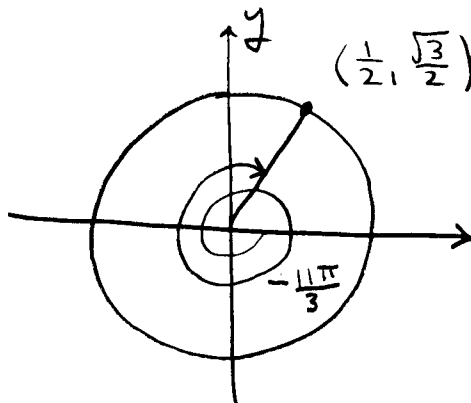
(1)[3 points] Find the exact values of $\sin(t)$ and $\cos(t)$ where $t = 11\pi/6$.



$$\therefore \sin\left(\frac{11\pi}{6}\right) = -\frac{1}{2}$$

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

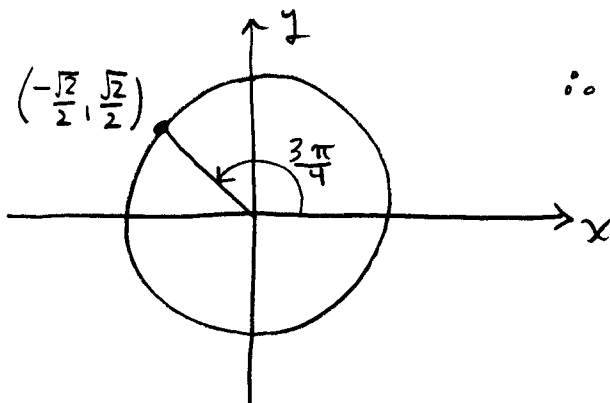
(2)[2 points] Find the exact value of $\sin(-11\pi/3)$.



$$\therefore \sin\left(-\frac{11\pi}{3}\right) = \frac{\sqrt{3}}{2}$$

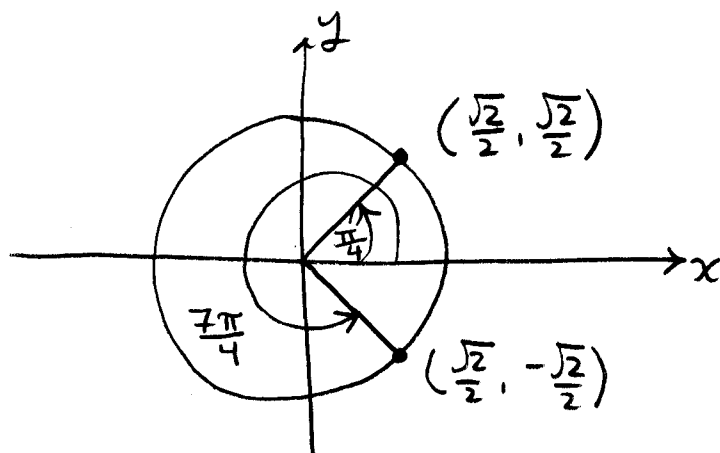
(3)[2 points] Find the exact value of $\sin(135^\circ)$.

$$135^\circ = 135^\circ \left(\frac{\pi}{180^\circ} \right) = \frac{3\pi}{4}$$



$$\therefore \sin(135^\circ) = \frac{\sqrt{2}}{2}$$

(4)[4 points] Find all angles t where $0 \leq t < 2\pi$ for which $\cos(t) = \sqrt{2}/2$.

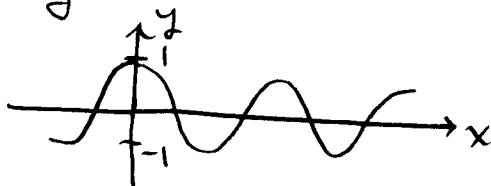


$$\therefore t = \frac{\pi}{4}, \frac{7\pi}{4}$$

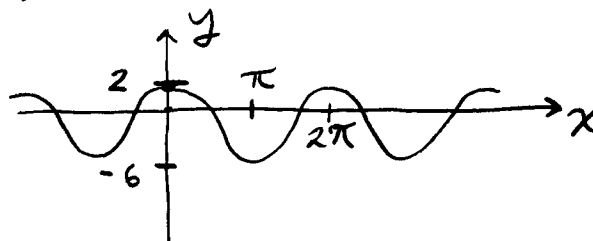
(5)[4 points] Sketch the graph of $y = -2 + 4 \cos x$. Show at least one complete cycle, carefully label the x and y axes and indicate the scale on each.

$$y = 4 \cos x - 2$$

① $y = \cos x$



③ $y = 4 \cos x - 2$



② $y = 4 \cos x$

