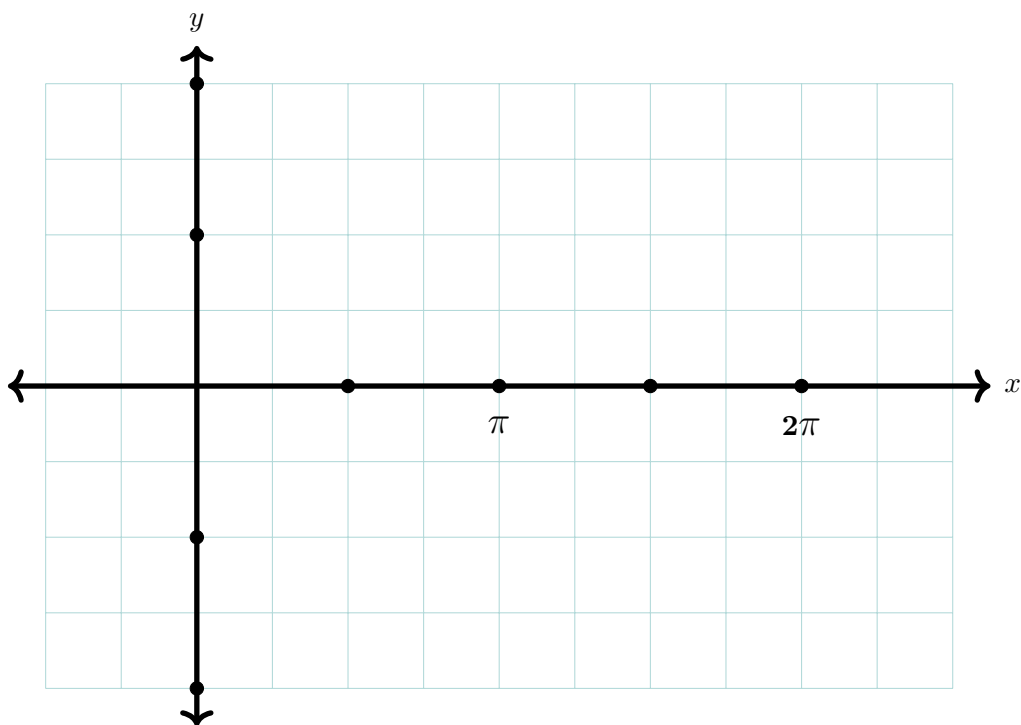Name: _____

Class: _____

Score: _____

**No Work $\Leftrightarrow$ No Points**

**Use Pencil Only $\Leftrightarrow$ Be Neat & Organized**

1. **(6 points) Graph** $f(x) = 2\sin x$ **over the interval** $[0, 2\pi]$**, then clearly shade the region bounded by** $f(x), x = \frac{\pi}{4}, x = \frac{3\pi}{4}$**, and the** $x-$**axis.**



2. **(6 points) Find all solutions for** $\sqrt{2}\cos x = 1$ **on** $[0, 2\pi)$**.**
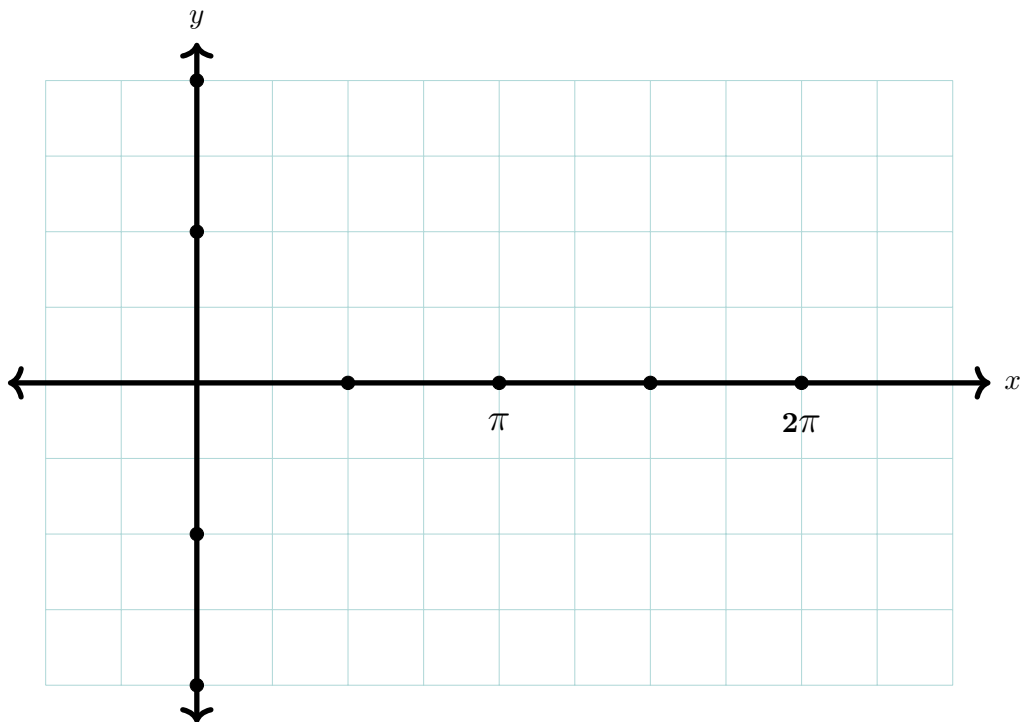
**2.** _____

**3. (6 points)** Graph $f(x) = -\cos x$ over the interval $[0, 2\pi]$, then clearly shade the region bounded by $f(x)$, $x = \frac{\pi}{2}$, $x = \frac{3\pi}{2}$, and the $x$−axis.



**4. (6 points)** Find all solutions for $2\sin 2x + 1 = 0$ on $[0, 2\pi)$.

4. _____

**5. (6 points)** Find all solutions for $\tan \frac{1}{2}x + 1 = 0$ on $[0, 2\pi)$.

5. _____

DLA Seires 7  Total Points: 30