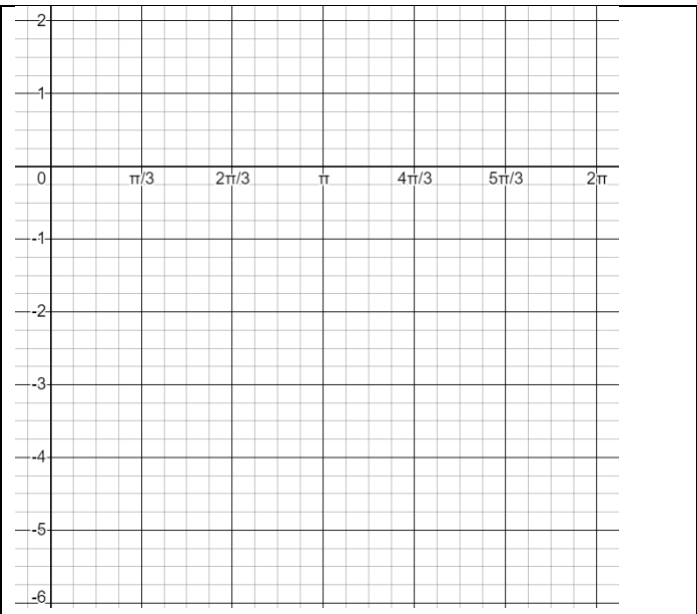
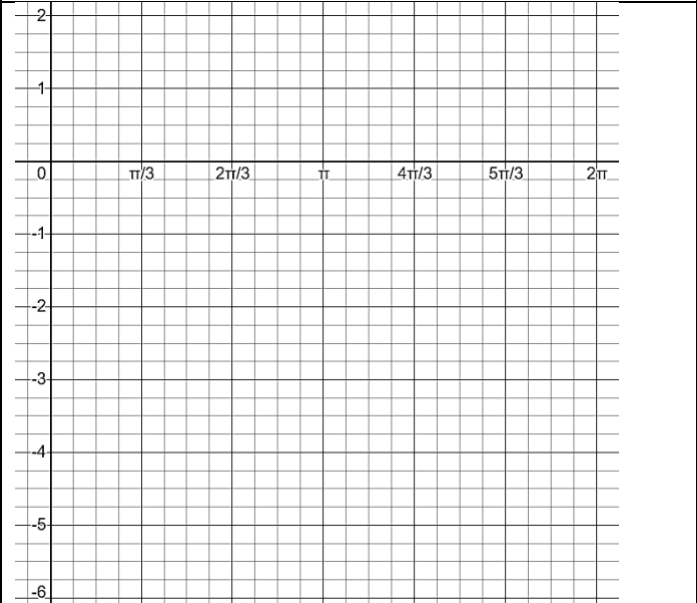



Name: _____ Per: _____

5.3 Day 2 Solving Trig Equations Worksheet

Solve the following by factoring on the interval $[0, 2\pi)$. Then use a calculator/Desmos to sketch the graph of the left-hand side of the equation and verify your solution(s).

1. $2 \cos^2 x + 3 \sin x - 3 = 0$	
2. $\cos^2 x + 2 \sin x - 2 = 0$	
3. $2 \cos^2 x + \cos x = 0$	

CONTINUED ON THE BACK SIDE

Name: _____ Per: _____

4. Solve the following multiple-angle equation and provide all the solutions in general.

$$2\sin 2x + \sqrt{3} = 0$$

5. Solve the following multiple-angle equation and provide all the solutions in general.

$$2\cos 3x - 1 = 0$$

6. Here is a graph of the left-side of the equation for Problem 4. Explain how your solution matches the graph.

