

Polar Coordinates

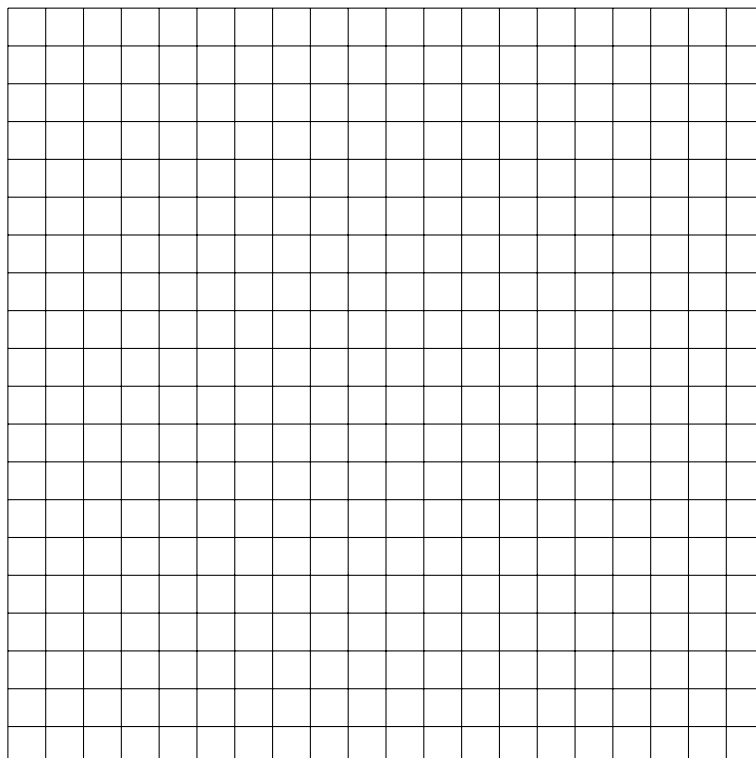
Practice Your Understanding

Name: _____

Date: _____

1. Write down the equations for converting from Cartesian coordinates to Polar coordinates and for converting from Polar coordinates to Cartesian coordinates below:

2. Using the formula for converting from Cartesian to Polar coordinates, plot the point $(3, 4)$ (x, y) in the Cartesian and Polar coordinate system. Show work for the conversion in the box below, and draw the points on the graph below:



3. Using the formula for converting from Polar to Cartesian coordinates, plot the point $(7.8, 53.67)$ (r, θ) in the Polar and Cartesian coordinate system. Show work for the conversion in the box below (Note: You can round your answer to up to two decimal places), and draw the points on the graph below:

