## **In-Class Exercise: Coordinate Conversions**

Polar coordinates  $(r, \theta)$  are converted to rectangular coordinates (x, y) according to the geometric relations:

$$x = r \cdot cos(\theta)$$
$$y = r \cdot sin(\theta)$$

Create a subVI which performs the conversion. As general subVI characteristics, include the following:

- Appropriate terminals and a meaningful icon.
- Documentation of the basic features.
- Appropriate initial values in all controls and indicators.
- Error handling as applicable.

You may modify the subVI created for the corresponding *Worked Example: Coordinate Conversions* as desired...

John D. Wellin 03/03/09