Name: _____

Chapter 6 –Section 6.1 Reflections and Symmetry

TICKET-IN-THE-DOOR

In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class.

Given $y = f(x)$ describe in words the transformation when k is a positive constant:

- $y = -f(x)$
- $y = f(-x)$

Check your understanding:

1. The graph of $f(x)$ contains the point $(5, -2)$. What **point** must lie on the reflected graph if the graph is reflected about the x-axis?

2. The graph of $P(t)$ contains the point $(-5, -1)$. What is another point on the graph if $P(t)$ is an *even* function?

3. An *odd* function is decreasing and concave up in the first quadrant. How does the function behave in the third quadrant?

4. Is the function $f(x) = x^5 - 4x^2 + 5$ odd, even, or neither?

5. Is the function $h(x) = \frac{2x^2}{5x^3}$ odd, even, or neither?