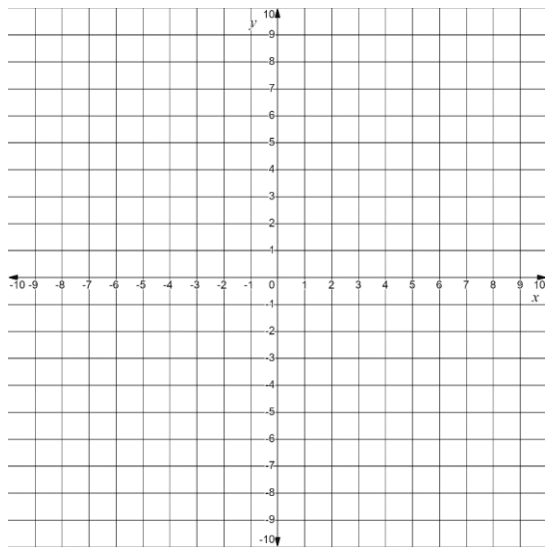
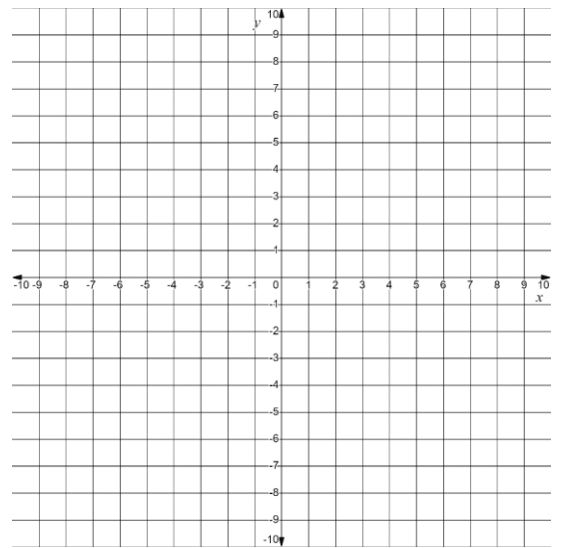


Name: _____

Date: _____

Learning Goal 1.1

Understanding new ideas about functions and applying that to previously knowledge.

Even Function**Odd Function****Example** Determine whether the function is even, odd or neither.

a. $f(x) = x^5 + x$

b. $g(x) = 1 - 2x^4$

c. $h(x) = 2x - 3x^2$

The Difference Quotient

Example Evaluate the difference quotient for the following function. Simplify your answer.

a. $f(x) = 2 - x^2$

b. $y = -x^2 + 4x + 1$

Example When you turn on a hot – water faucet, the temperature T of the water depends on how long the water has been running. Draw a rough graph of T as a function of the time t that has elapsed since the faucet was turned.