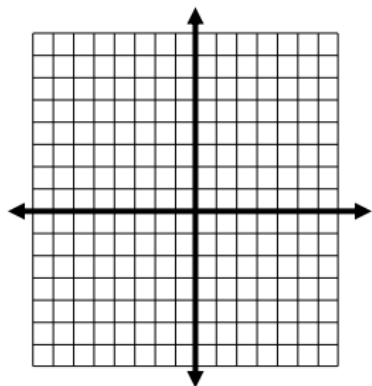


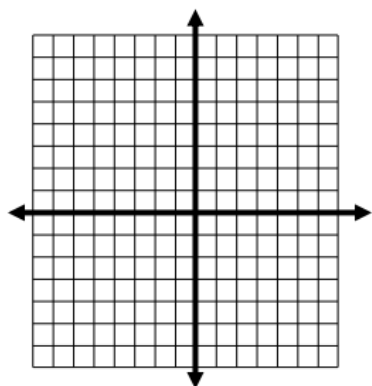
Name: _____

Graph each function. Identify the domain and range.

1.
$$f(x) = \begin{cases} x + 2 & \text{if } x \leq -2 \\ 3x & \text{if } x > -2 \end{cases}$$

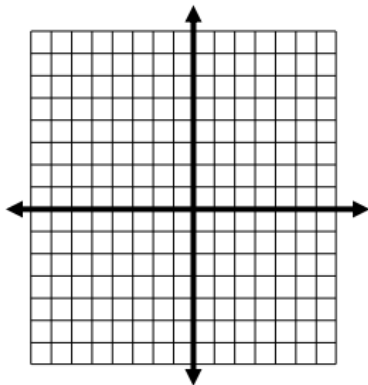


2.
$$f(x) = \begin{cases} -2 & \text{if } x < -4 \\ x - 3 & \text{if } -1 \leq x \leq 5 \\ 2x - 15 & \text{if } x > 7 \end{cases}$$

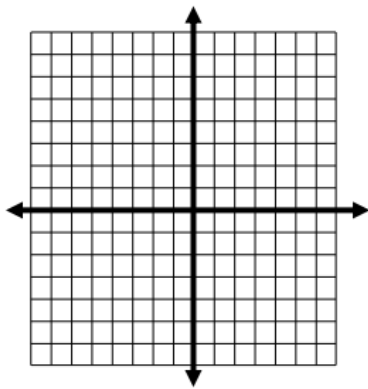


Algebra 2

3. $f(x) = |x + 1|$



4. $f(x) = 2|x - 4| + 6$



5. A wholesaler charges a store \$3.00 per pound for less than 20 pounds of candy and \$2.50 per pound for 20 or more pounds. Draw (with labels) a graph of the function that represents this situation.

Algebra 2

6. Write an absolute value function in which $f(5) = -3$

7. A car's speedometer reads 60 miles an hour.
 - a. Write an absolute value function for the difference between the car's actual speed a and the reading on the speedometer.

 - b. What is an appropriate domain for the function? Explain.

 - c. Use the domain to graph the function.