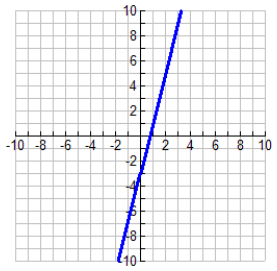
WARM-UP

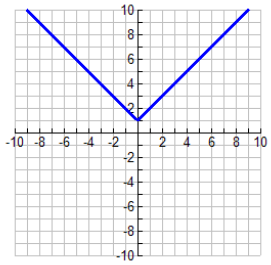
Even, Odd, or Neither Name: _____

Determine by graphing whether the following functions are even, odd, or neither.

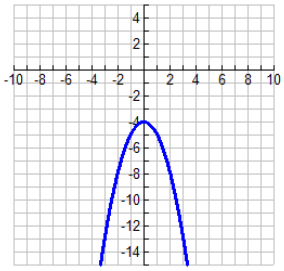
1. f(x)= 4x – 3



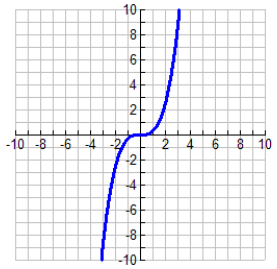
2. f(x)= $|x|+1$



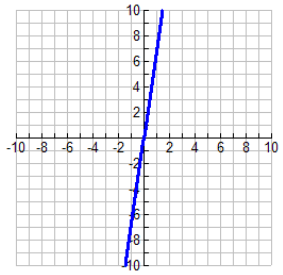
3. f(x)= $-x^2 - 4$



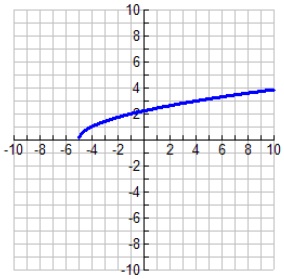
4. f(x)= $\frac{1}{3}x^3$



5. f(x)= 7x



6. f(x)= $\sqrt{x+5}$



Determine by replacing f(-x) whether the following functions are even, odd, or neither.

7. f(x)= $3x^2$

8. f(x) = $x^3 - 2$

9. f(x)= 3x + 4

10. f(x)= $x^2 - 5$

11. f(x)= 10x + 5

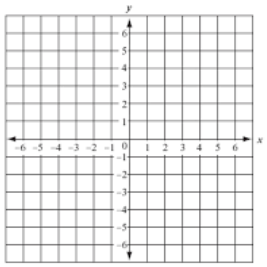
12. f(x)= $2(x+1)^3$

Functions RECAP Name: _____

Pre-Quiz

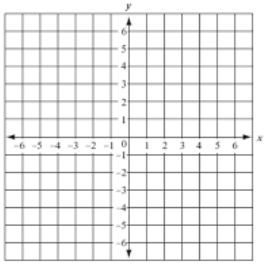
Answer each of the following based on the equation given.

$$y = -\sqrt{3x - 2}$$



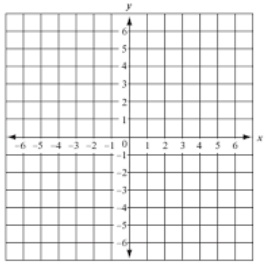
1. Graph using at least 3 points from the table of values.
2. Vertex: _____
3. Axis of Symmetry: _____
4. Domain: _____
5. Range: _____
6. x-intercept(s) : _____
7. y-intercept: _____
8. Interval of Increase: _____
9. Interval of Decrease: _____
10. End Behavior: $x \to -\infty$ _____ & $x \to \infty$ _____
11. Even, Odd, or Neither? How do you know? Prove using two different methods. _____
12. $f^{-1}(x)$ = Is the inverse a function? _____

$$f(x) = 2|x + 3|$$



1. Graph using at least 3 points from the table of values.
2. Vertex: _____
3. Axis of Symmetry: _____
4. Domain: _____
5. Range: _____
6. x-intercept(s) : _____
7. y-intercept: _____
8. Interval of Increase: _____
9. Interval of Decrease: _____
10. End Behavior: $x \to -\infty$ _____ & $x \to \infty$ _____
11. Even, Odd, or Neither? How do you know? Prove using two different methods. _____
12. $f^{-1}(x)$ = Is the inverse a function? _____

$$f(x) = 7x^3 - 1$$



1. Graph using at least 3 points from the table of values.
2. Vertex: _____
3. Axis of Symmetry: _____
4. Domain: _____
5. Range: _____
6. x-intercept(s) : _____
7. y-intercept: _____
8. Interval of Increase: _____
9. Interval of Decrease: _____
10. End Behavior: $x \to -\infty$ _____ & $x \to \infty$ _____
11. Even, Odd, or Neither? How do you know? Prove using two different methods. _____

12. $f^{-1}(x)$ = Is the inverse a function? _____