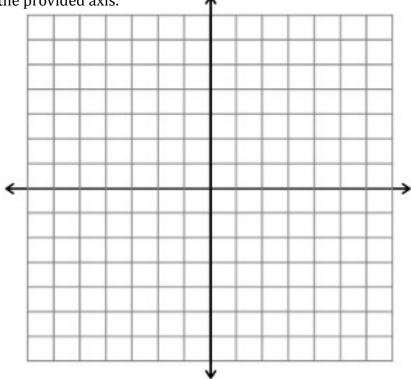
## **CALCULUS: Chapter 0 Test**

**Graph** the following function on the provided axis.

1. 
$$y = \frac{3}{4}x + 1$$



Identify **all intercepts** of the following functions.

2. 
$$f(x) = x^2 + 9x + 14$$

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

$$4. f(x) = 3x + 2$$

**Evaluate**  $f(x) = x^2 + 2x - 1$  at the following values.

$$7. f(x + 4)$$

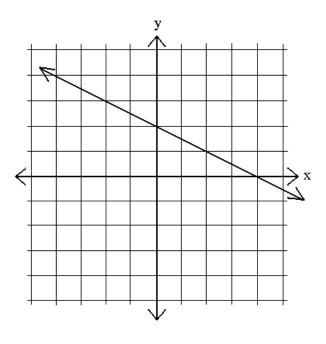
Determine if the following functions have **x-axis symmetry**, **y-axis symmetry**, **symmetry to the origin**, **a combination of the three**, **or none**. Show all work.

8. 
$$y = x^2$$

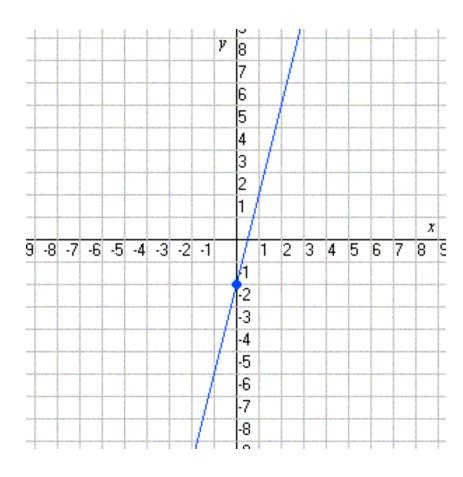
9. 
$$y^4 = x + 2$$

10. 
$$y = 4x^3 + 2x$$

11.



12.



Find a line **parallel and perpendicular** to each given line.

13. 
$$y = \frac{1}{2}x + 5$$

14. 
$$y = -\frac{5}{6}x + 3$$

Determine the **domain** of the following functions.

15. 
$$y = x^2 + 3x - 15$$

16. 
$$y = \sqrt{2x + 3}$$

17. 
$$y = \frac{x+7}{x-3}$$