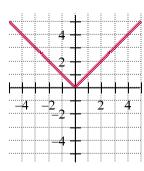
## **Symmetry**

Name:\_\_\_\_\_

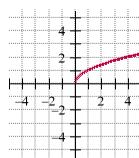
- 1. If a function is even, its graph is symmetric with respect to the \_\_\_\_\_. This also means that f(-x) = \_\_\_\_\_.
- 2. If a function is odd, its graph is symmetric with respect to the \_\_\_\_\_. This also means that f(-x) = \_\_\_\_\_.

Determine whether each function graphed is even, odd, or neither

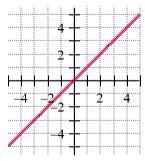
\_\_\_\_3.



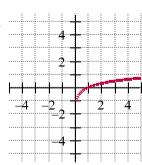
\_\_\_4.



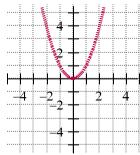
5.



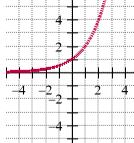
\_\_\_\_6



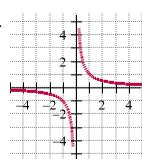
\_\_\_\_7.



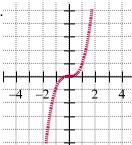
8.



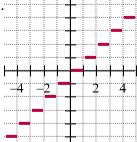
a



10.



\_\_\_11.



## Algebra.IIHW

Determine algebraically whether each of the following functions is even, odd or neither.

12. 
$$f(x) = 4x + 5$$

13. 
$$f(x) = x^3 - x$$

14. 
$$f(x) = x^2 - 6$$

15. 
$$f(x) = x^3 - x - 2$$

16. 
$$f(x)=|x|$$

17. 
$$f(x) = \frac{x^3 - x}{x^5}$$

18. 
$$f(x) = (x-4)^2$$

19. 
$$f(x) = x^4 - x^2 + 4$$