Symmetry

1. If a function is even, its graph is symmetric with respect to the ______________.
   This also means that $f(-x) = \underline{\hphantom{10}}$

2. If a function is odd, its graph is symmetric with respect to the ______________.
   This also means that $f(-x) = \underline{\hphantom{10}}$

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

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

11. 

Name: ________________________________
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. \( f(x) = \frac{x^4 - x}{x^5 - x} \) 

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

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

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