

Name _____
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Date _____
Algebra II

Even and Odd Functions

Determine whether the following functions are even, odd, or neither

1. $f(x) = x^2$

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

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

4. $f(x) = x^3 + 1$

5. $f(x) = x^7 + 2x^5 - 9x$

6. $f(x) = -9x^6 - 6x^9$

7. $f(x) = -6x^3 - 8x$

8. $f(x) = 10x^2 + 8x^4 - 4x$

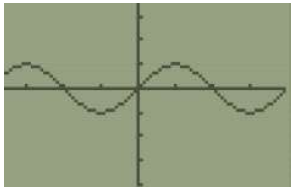
9. $f(x) = -7x^8 + 7$

10. $f(x) = |x| + 4$

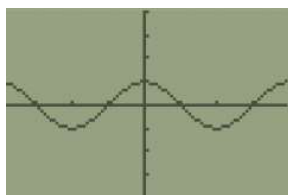
11. $f(x) = |x + 4|$

12. $f(x) = \frac{10}{x}$

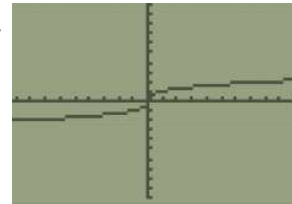
13.



14.



15.



Determine whether the following functions are even, odd, or neither algebraically

16. $f(x) = x^2$

17. $f(x) = x^3$

18. $f(x) = x + 2$

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

20. $f(x) = x^4 + 2x^2 - 7$

21. $f(x) = x^7 + 2x^3 + 8x$

22. $f(x) = x^6 + 4x^2 - 7x^{10} + 5$

23. $f(x) = 2x^7 + 3x^6 - 4x^5 + 5x^4$