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 $f(-x) =$ _____
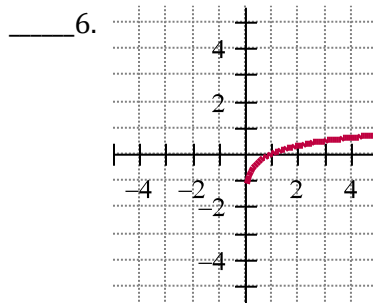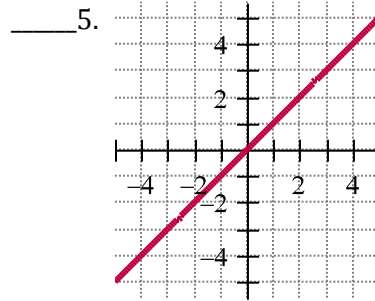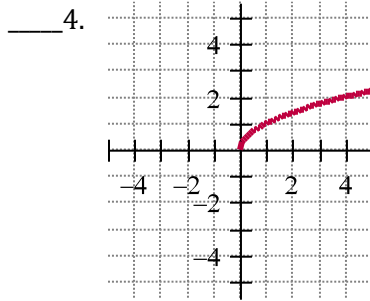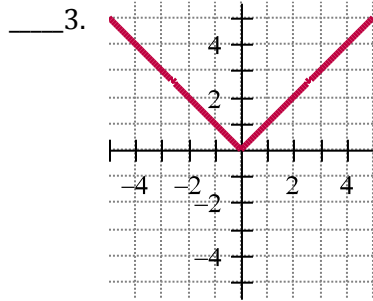
Determine whether each function graphed is even, odd, or neither

____3.

____4.

____5.

____6.

____7.

____8.

____9.

____10.

____11.

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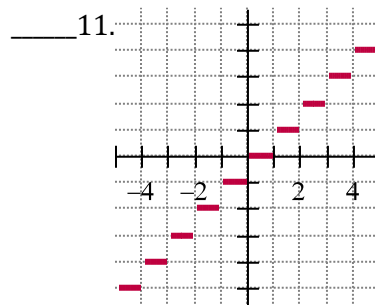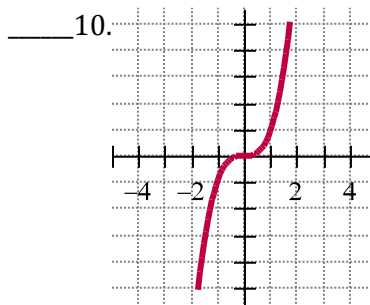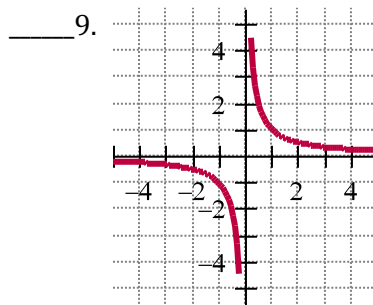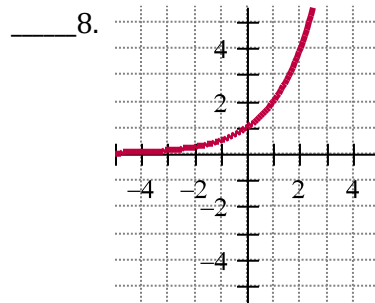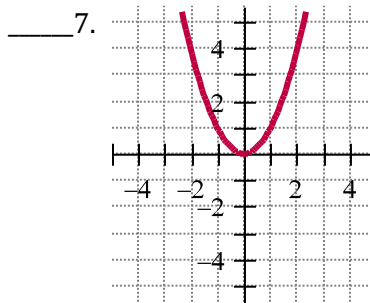
Determine algebraically whether each of the following functions is even, odd or neither.

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. $f(x) = \dfrac{x^4 - x}{x^5 - x}$

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

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

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