

Exercise 51

For the following exercises, determine whether the function is odd, even, or neither.

$$g(x) = 2x^4$$

Solution

Plug in $-x$ for x and see if the result is either $g(x)$ or $-g(x)$.

$$\begin{aligned}g(-x) &= 2(-x)^4 \\ &= 2(-1)^4 x^4 \\ &= 2(1)x^4 \\ &= 2x^4 \\ &= g(x)\end{aligned}$$

Therefore, the function is even.