Exercise 47

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

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

Solution

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

$$f(-x) = 3(-x)^4$$
$$= 3(-1)^4 x^4$$
$$= 3(1)x^4$$
$$= 3x^4$$
$$= f(x)$$

Therefore, the function is even.