## Exercise 50

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

$$
f(x)=(x-2)^{2}
$$

## Solution

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

$$
\begin{aligned}
f(-x)=(-x-2)^{2}=(x+2)^{2} & \neq f(x) \\
& \neq-f(x)
\end{aligned}
$$

Therefore, the function is neither even nor odd.

