## Exercise 61

In Exercises 47-62, say whether the function is even, odd, or neither. Give reasons for your answer.

$$
\cos 3 x
$$

## Solution

The function is even because cosine is an even function.

$$
\begin{aligned}
\cos 3(-x) & =\cos (-3 x) \\
& =\cos 3 x
\end{aligned}
$$

This is reflected in the graph by the symmetry about the $y$-axis.


