

## Exercise 59

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

$$\sin 2x$$

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### Solution

The function is odd because sine is an odd function.

$$\begin{aligned}\sin 2(-x) &= \sin(-2x) \\ &= -\sin 2x \\ &= -(\sin 2x)\end{aligned}$$

This is reflected in the graph by the symmetry about the origin.

