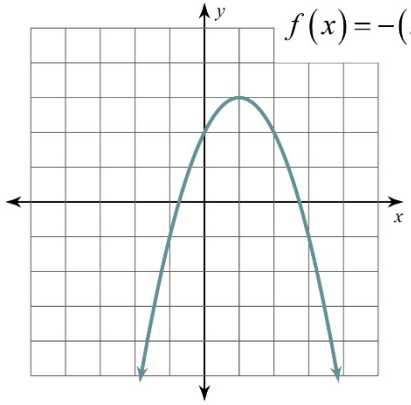
EVEN, ODD, OR NEITHER

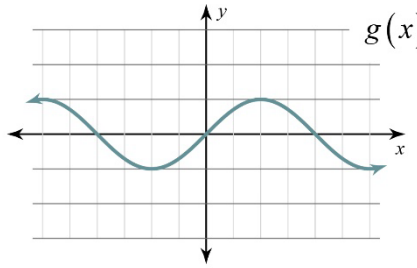
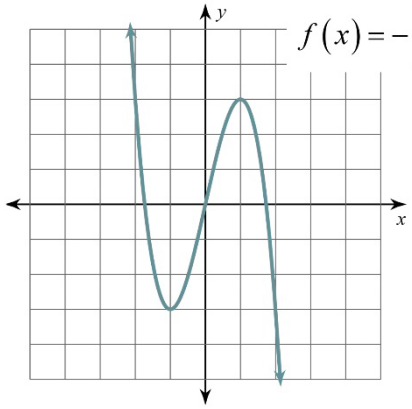
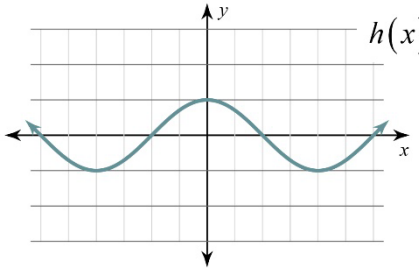
Analyze each graph below to make a prediction to determine whether the graph has line symmetry, point symmetry, or no symmetry.

- A graph with **line symmetry** could be folded along a line so that the two halves match perfectly.
- A graph with **point symmetry** could be rotated 180° about a point and the graph would appear the same.

Use your prediction to algebraically prove whether a function is even, odd, or neither.

- A function is **even** if $f(-x) = f(x)$. Even functions are symmetric with respect to the y-axis.
- A function is **odd** if $f(-x) = -f(x)$. Odd functions are symmetric with respect to the origin.

Graph	Line, Point, or No Symmetry	Even, Odd, or Neither
		

Graph	Line, Point, or No Symmetry	Even, Odd, or Neither
 $g(x)=\sin x$		
 $f(x)=-\frac{3}{2}x^3+\frac{9}{2}x$		
 $h(x)=\cos x$		