

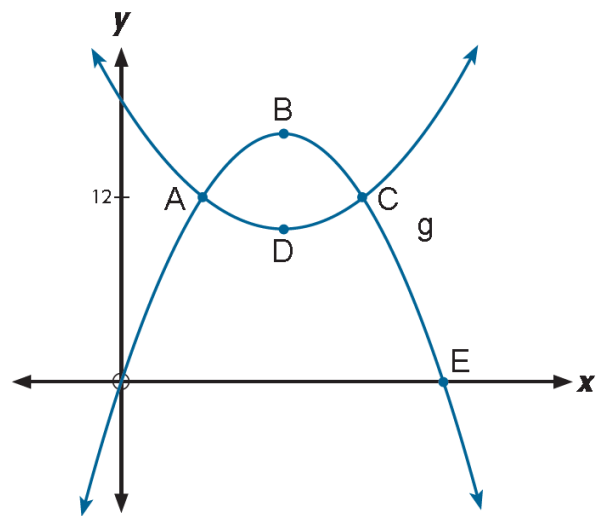
In the coordinate plane below, function  $f$  and  $g$  are represented by parabolas.

Points B and D have the same  $x$ -coordinate and they are also the vertices of these parabolas.

The parabolas intersect each other at points A and C. The  $y$ -coordinate of these points is 12.

Function  $g$  intersects the  $x$ -axis at the origin of the coordinate plane and at point E.

If the rule of function  $f$  is  $f(x) = 0.5(x - 4)^2 + 10$ , what is the rule of function  $g$ ?



Function  $f$  and  $g$  are shown in the coordinate plane below.

The parabola that represents function  $f$  passes through the points B and C.

The parabola that represents function  $g$  passes through points A and B. Point A is the vertex of function  $g$ .

Point B is located on the y-axis.

Point C is located on the x-axis.

The  $x$ -coordinate of point A is the same as the  $x$ -coordinate of point C.

Point A is 14 units below point C.

If the rule of function  $f$  is  $f(x) = -0.5x^2 + 6x - 10$ , what is the rule of function  $g$ ?

