

## Exercise 54

For the following exercises, use graphs of  $f(x)$ , shown in Figure 6,  $g(x)$ , shown in Figure 7, and  $h(x)$ , shown in Figure 8, to evaluate the expressions.

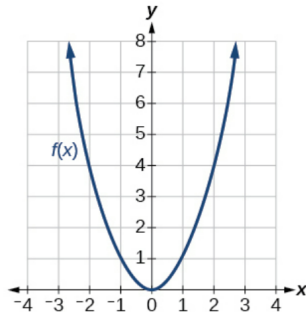


Figure 6

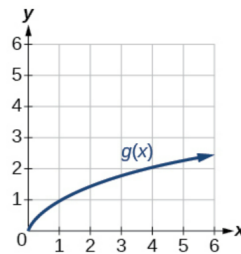


Figure 7

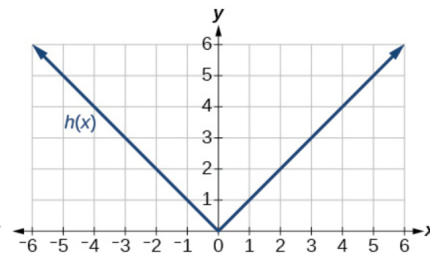
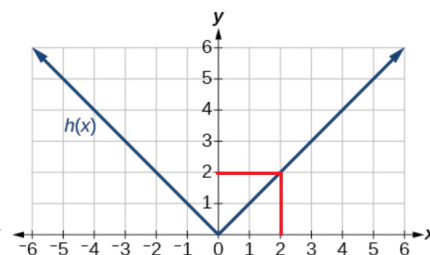
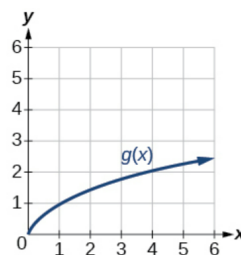
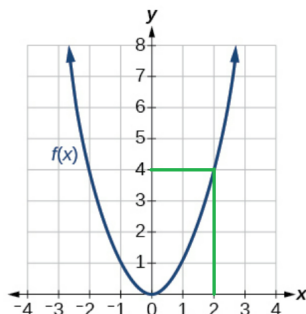


Figure 8

$$f(h(2))$$

### Solution

Notice from the graphs that  $h(2) = 2$  and  $f(2) = 4$ .



Therefore,

$$f(h(2)) = f(2) = 4.$$