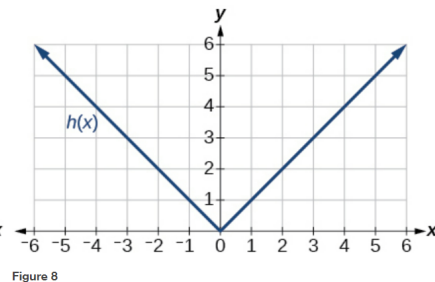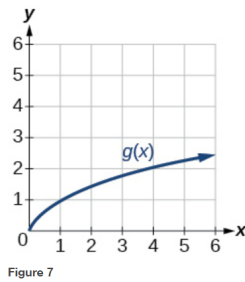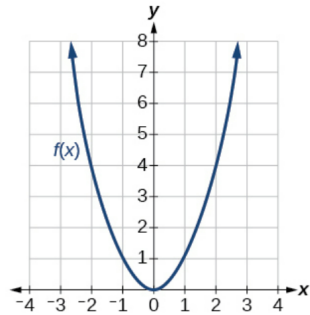## Exercise 57
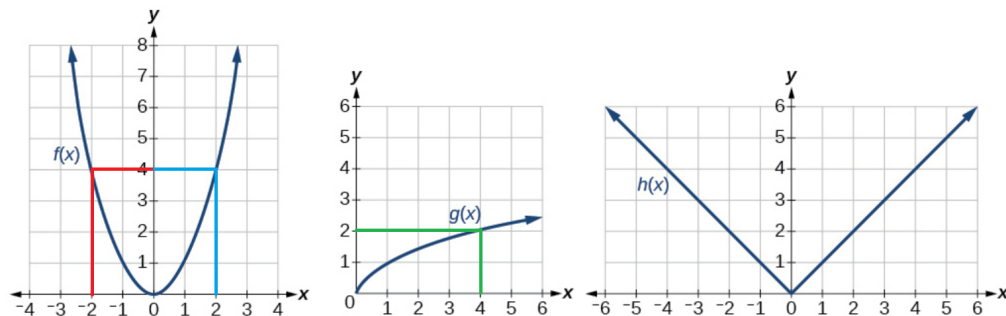
For the following exercises, use graphs of $f(x)$, shown in Figure 6, $g(x)$, shown in Figure 7, and $h(x)$, shown in Figure 8, to evaluate the expressions.

Figure 6

Figure 7

Figure 8

$$f(g(f(-2)))$$

Solution

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

Therefore,

$$f(g(f(-2))) = f(g(4)) = f(2) = 4.$$