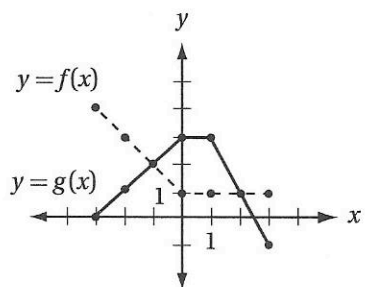# Exercise Set 1 (No Calculator)

Questions 12–19 are based on the graph below.

12

What is the value of $g(-1)$?

13

What is the value of $g(f(3))$?

14

What is the value of $f(g(3))$?

15

If $g(f(x)) = -1$, what is the value of $x + 10$?

16

If $f(k) + g(k) = 0$, what is the value of k?

17

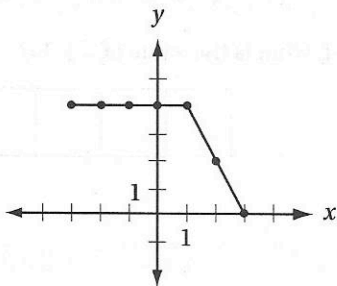If $f(a) = g(a)$, where $a < 0$, and $f(b) = g(b)$, where $b > 0$, what is the value of $a + b$?

18

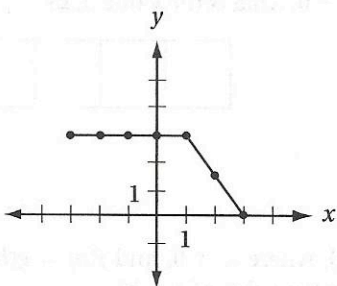Let $h(x) = f(x) \times g(x)$. What is the maximum value of $h(x)$ if $-3 \leq x \leq 3$?

19

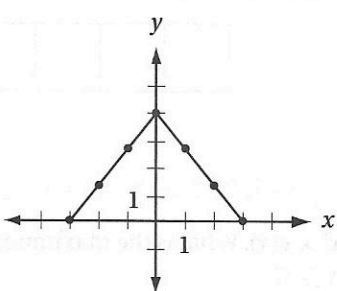Which of the following graphs represents the function $y = f(x) + g(x)$?

A)

B)

C)

D)