

Let

$$f(x) = \begin{cases} 2x + 1 & \text{if } x < -2 \\ 3x - 2 & \text{if } x \geq -2 \end{cases},$$

let

$$g(x) = \begin{cases} |x + 3| & \text{if } x \leq 0 \\ x^2 - 4 & \text{if } x > 0 \end{cases},$$

and let  $h(x) = 2x - 3$ . Compute each of the following composite functions.

1.  $f \circ h(x)$

2.  $h \circ f(x)$

3.  $h \circ g(x)$

4.  $g \circ h(x)$

5.  $f \circ g(x)$

6.  $g \circ f(x)$