Name: _____ Period: _____ Date: _____

Function Operations and Composition of Functions Exit Quiz

Multiple choices

1. For $f(x) = x^2$ and $g(x) = 2x + 4$, the value of $(f + g)(-1)$ is:

a.) 1 b.) 3

c.) 4 d.) -4

2. For $f(x) = \sqrt{x}$ and $g(x) = x + 1$, the value of $(f \circ g)(3)$ is:

a.) 2 b.) 4

c.) $\sqrt{2}$ d.) 3

3. For $f(x) = x - 3$ and $g(x) = x + 1$, the domain of $\left(\frac{f}{g}\right)(x)$ is:

a.) $D_{\frac{f}{g}} = (-\infty, -1) \cup (-1, \infty)$ b.) $D_{\frac{f}{g}} = (-\infty, 1) \cup (1, \infty)$

c.) $D_{\frac{f}{g}} = (-\infty, -3) \cup (-3, \infty)$ d.) $D_{\frac{f}{g}} = (-\infty, 3) \cup (3, \infty)$

4. Find each function value.

The tables give some selected ordered pairs for functions f and g

x	1	2	5	7
$g(x)$	9	3	6	4

x	3	4	6	9
$f(x)$	9	-3	7	6

$(f \circ g)(2) = ?$
$(g \circ f)(6) = ?$

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Function Operations and Composition of Functions Exit Quiz

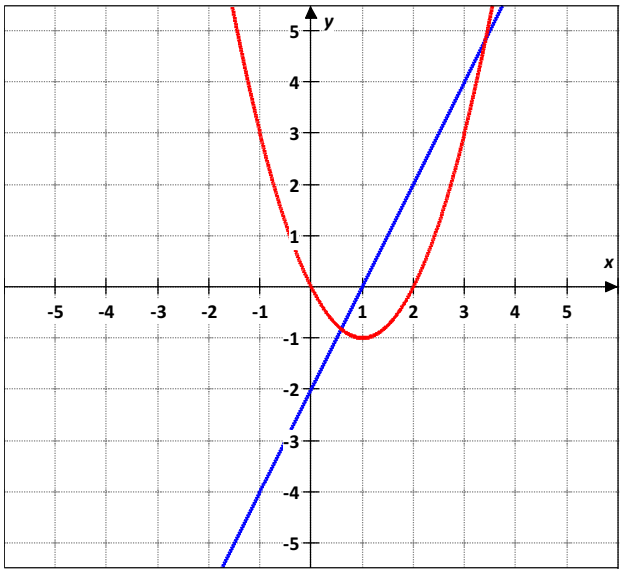
5. Find each function value.

The graphs of functions f and g are given below.

f ——→ g ——→

$(f \circ g)(2) = ?$

$(g \circ f)(1) = ?$



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$(g \circ f)(6) = ?$

$(f \circ g)(2) = ?$
$(f \circ g)(2) = f(g(2)) = f(3) = 9$

$(g \circ f)(6) = ?$
$(g \circ f)(6) = g(f(6)) = g(7) = 4$

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Function Operations and Composition of Functions Exit Quiz

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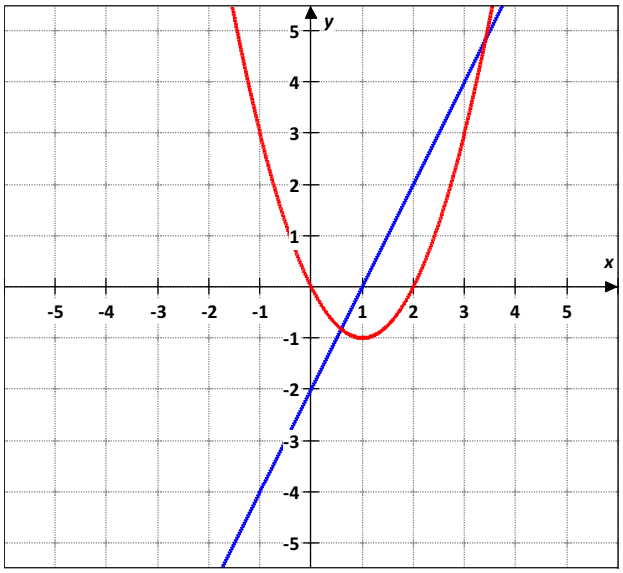

$(f \circ g)(2) = ?$

$(f \circ g)(2) = f\big(g(2)\big) = f(0) = -2$

$(g \circ f)(1) = ?$

$(g \circ f)(1) = g\big(f(1)\big) = g(0) = 0$

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