

Use the following functions:

$$f(x) = x + 6 \quad g(x) = x^2 - 3x \quad h(x) = \frac{3x-1}{5} \quad k(x) = x^2 + 5 \quad j(x) = \frac{5x+1}{3} \quad p(x) = x^2$$

Find the value or simplify each composite function. Show your work.

1. $j(f(-8))$

2. $(g \circ h)(7)$

3. $(g \circ g)(6)$

4. $k(k(w))$

Simplify each composite function. Show your work.

5. $(k \circ f)(x)$

6. $g(p(x))$

7. $j(h(x))$

8. $h(j(x))$

9. $(p \circ j)(x)$