

Given $f(x) = \frac{2}{x+4}$ and $g(x) = x^2 - 2$, find each function.

1. $(f + g)(x)$

2. $(f - g)(x)$

3. $(f \cdot g)(x)$

4. $\left(\frac{f}{g}\right)(x)$

Find $(f \circ g)(x)$ and $(g \circ f)(x)$.

$$5. f(x) = \frac{1}{3}x + 5$$

$$g(x) = x - 3$$

$$6. f(x) = 2x^3 - 3x^2 + 1$$

$$g(x) = 3x$$

Find $(f \circ g)(x)$ and $(g \circ f)(x)$.

$$7. f(x) = 2x^2 - 5x + 1$$

$$g(x) = 2x - 3$$

$$8. f(x) = 3x^2 - 2x + 5$$

$$g(x) = 2x - 1$$

Given $f(x) = |3x - 4| + 5$, find each value.

13. $f\left(\frac{1}{3}\right)$

14. $f(.5)$

15. $f(-0.5)$

16. $f(5d)$