

Name:

Period:

| | | |
|--------------|------------------------|--------------|
| First Score: | First attempt due: | Final Score: |
| | Final corrections due: | |

Practice:**Function Operations & Composition**

Perform the indicated operation and simplify completely. Show all work to get credit.

| | | | |
|--------------|--------------|------------|--------------|
| $f(x) = 10x$ | $g(x) = -5x$ | $h(x) = 8$ | $j(x) = -10$ |
|--------------|--------------|------------|--------------|

1] $(f + j)(x) =$

2] $(f - g)(x) =$

3] $(g \cdot h)(x) =$

4] $\left(\frac{g}{j}\right)(x) =$

5] $(h - g)(5) =$

6] $(f \cdot g)(-1) =$

| | | | |
|-----------------|-----------------|-------------|-------------|
| $f(x) = 6x + 4$ | $g(x) = 4 - 6x$ | $h(x) = 2x$ | $j(x) = -2$ |
|-----------------|-----------------|-------------|-------------|

7] $(f + g)(x) =$

8] $(f - g)(x) =$

9] $(f \cdot j)(x) =$

10] $\left(\frac{g}{j}\right)(x) =$

11] $(h - g)\left(\frac{1}{2}\right) =$

12] $(f \cdot g)\left(-\frac{1}{6}\right) =$

| | | | |
|--------------|------------------|-------------------|------------|
| $f(x) = x^2$ | $g(x) = 10x + 5$ | $h(x) = \sqrt{x}$ | $j(x) = 5$ |
|--------------|------------------|-------------------|------------|

13] $(f + g)(x) =$

14] $(f - g)(x) =$

15] $(f \cdot j)(x) =$

16] $\left(\frac{g}{j}\right)(x) =$

17] $(h + j)(49) =$

18] $(f \cdot h)(4) =$