**Task card 1** Function Operations (Sum, Differen...

$f(x) = 5x + 6$ and $g(x) = -x^2 - 7x - 9$. Find $(f \cdot g)(x)$.

**Task card 2** Function Operations (Sum, Differen...

$f(x) = 2x^2 - 5x + 4$ and $g(x) = x^2 - 8x - 9$. Find $(f - g)(x)$.

**Task card 3** Function Operations (Sum, Differen...

$f(x) = 5x - 2$ and $g(x) = x^2 - 7x + 1$. Find $\left(\frac{f}{g}\right)(2)$.

**Task card 4** Function Operations (Sum, Differen...

$f(x) = -3x - 8$ and $g(x) = x + 5$. Which value of x is not in the domain of $\left(\frac{f}{g}\right)(x)$?

**Task card 5** Function Operations (Sum, Differen...

$f(x) = 5x + 2$ and $g(x) = x^2 + 5x + 2$. Find $2f(x) - 3g(x)$.

**Task card 6** Function Operations (Sum, Differen...

$f(x) = 5x + 2$ and $g(x) = x^2 - 9x - 7$. Find $(f \cdot g)(-2)$.

**Task card 7** Function Operations (Sum, Differen...

$f(x) = 2x - 9$ and $g(x) = x^2 - 9x - 5$. Find $2f(3) + (f \cdot g)(3)$.

**Task card 8** Function Operations (Sum, Differen...

$f(x) = 4x - 4$ and $g(x) = x^2 + 6x + 5$. Which two values of x are not in the domain of $\left(\frac{f}{g}\right)(x)$?

Write x = a or x = b.

**Task card 9** Function Operations (Sum, Differen...

$f(x) = 6x - 9$ and $g(x) = 2x^2 - 6x - 7$. Find $(f \cdot g)(x)$.

**Task card 10** Function Operations (Sum, Differen...

$f(x) = 3x^2 + 2x - 9$ and $g(x) = -x^2 + x - 4$. Find $(g - f)(x)$.

**Task card 11** Function Operations (Sum, Differen...

$f(x) = 3x + 6$ and $g(x) = x^2 - 8x + 3$.

Find $\left(\frac{f}{g}\right)(1)$.

**Task card 12** Function Operations (Sum, Differen...

$f(x) = -4x + 2$ and $g(x) = x^2 + 3x - 4$. Which two values of x are not in the domain of $\left(\frac{f}{g}\right)(x)$?

Write x = a or x = b.

**Task card 13** Function Operations (Sum, Differen...

$f(x) = x - 2$ and $g(x) = -x^2 + 9x + 4$. Find $3f(x) - 3g(x)$.

**Task card 14** Function Operations (Sum, Differen...

$f(x) = -x - 8$ and $g(x) = -x^2 - 8x - 1$. Find $(f \cdot g)(-4)$.

**Task card 15** Function Operations (Sum, Differen...

$f(x) = x + 8$ and $g(x) = x^2 - 4x - 9$. Find $2f(5) + (f \cdot g)(5)$.

**Task card 16** Function Operations (Sum, Differen...

$f(x) = 5x - 9$ and $g(x) = x^2 + 3x$. Which two values of $x$ are not in the domain of $\left(\frac{f}{g}\right)(x)$? Write $x = a$ or $x = b$.

**Task card 17** Function Operations (Sum, Differen...

$f(x) = 5x + 7$ and $g(x) = -x^2 - 4x + 9$. Find $(f \cdot g)(x)$.

**Task card 18** Function Operations (Sum, Differen...

$f(x) = 3x^2 - 4x - 8$ and $g(x) = -x^2 + 8x + 1$. Find $(g - f)(x)$.

**Task card 19** Function Operations (Sum, Differen...

$f(x) = -3x + 8$ and $g(x) = -x^2 - 2x + 7$. Find $\left(\frac{f}{g}\right)(-3)$.

**Task card 20** Function Operations (Sum, Differen...

$f(x) = -2x - 7$ and $g(x) = x^2 - 11x + 24$. Which two values of x are not in the domain of $\left(\frac{f}{g}\right)(x)$? Write x = a or x = b.

**Task card 21** Function Operations (Sum, Differen...

$f(x) = x - 9$ and $g(x) = -x^2 - x + 1$. Find $3f(x) - 3g(x)$.

**Task card 22** Function Operations (Sum, Differen...

$f(x) = 4x - 9$ and $g(x) = 2x^2 + 3x + 5$. Find $(f \cdot g)(3)$.

**Task card 23** Function Operations (Sum, Differen...

$f(x) = 5x - 1$ and $g(x) = -x^2 - 4x - 2$. Find $3f(-4) + (f \cdot g)(-4)$.

**Task card 24** Function Operations (Sum, Differen...

$f(x) = x - 4$ and $g(x) = x^2 - 9x + 8$. Which two values of x are not in the domain of $\left(\frac{f}{g}\right)(x)$? Write x = a or x = b.

# Function Operations (Sum, Difference, Product & Quotient) Task Cards

Recording sheet · Grade 11 · Find each value or expression. Write expressions in standard form, like x^2 - 3x + 4, and fractions in simplest form.

Scan to check your answers

Name: _____ Date: _____

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |

# Function Operations (Sum, Difference, Product & Quotient) Task Cards: Answer Key

Grade 11 · Hard

The answers online

| | | |
|---|---|---|
| **1.** $-5x^3 - 41x^2 - 87x - 54$ | **2.** $x^2 + 3x + 13$ | **3.** $\frac{8}{-9}$ |
| **4.** $x = -5$ | **5.** $-3x^2 - 5x - 2$ | **6.** -120 |
| **7.** 63 | **8.** $x = -5$ or $x = -1$ | **9.** $12x^3 - 54x^2 + 12x + 63$ |
| **10.** $-4x^2 - x + 5$ | **11.** $\frac{9}{-4}$ | **12.** $x = -4$ or $x = 1$ |
| **13.** $3x^2 - 24x - 18$ | **14.** -60 | **15.** -26 |
| **16.** $x = -3$ or $x = 0$ | **17.** $-5x^3 - 27x^2 + 17x + 63$ | **18.** $-4x^2 + 12x + 9$ |
| **19.** $\frac{17}{4}$ | **20.** $x = 3$ or $x = 8$ | **21.** $3x^2 + 6x - 30$ |
| **22.** 96 | **23.** -21 | **24.** $x = 1$ or $x = 8$ |