



Quiz Operations of Functions

Perform the indicated operation:

$$f(x) = x^2 + 2x$$

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

Find $(f-g)(x)$:

☐ A $x^2 + 3$

☐ B $-x^3 - 3$

☐ C $2x^3 + 2x - 3$

☐ D $x^2 + 4x - 3$

Abdulkader Amro

Perform the indicated operation:

$$f(x) = x^2 + 2x$$

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

Find $(g-f)(x)$:

☐ A $x^2 + 4x - 3$

☐ B $2x^2 - 6x$

☐ C $x^2 + 12x$

☐ D $-x^2 - 3$

Perform the indicated operation:

$$f(x) = x^2 + 2x$$

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

Find $(f-g)(2)$:

☐ A 7

☐ B 4

☐ C -3

☐ D 8



Perform the indicated operation:

$$f(x) = x^2 + 2x$$

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

Find $(g-f)(3)$:

- ☐ A 3
- ☐ B 30
- ☐ C -12
- ☐ D -27

Perform the indicated operation:

$$f(x) = 2x^3 + 4x^2 + 2x + 1$$

$$g(x) = x^3 - x^2 + 7x + 9$$

Find $(f+g)(x)$:

- ☐ A $3x^3 + 3x^2 + 9x + 10$
- ☐ B $3x^3 + 9x + 10$
- ☐ C $2x^6 + 3x^4 - 7x + 10$
- ☐ D $2x^3 + 5x^2 + 9x + 8$

Find $(f+g)(1)$: idicated operation:

$$f(x) = 2x^3 + 4x^2 + 2x + 1$$

$$g(x) = x^3 - x^2 + 7x + 9$$

Find $(f+g)(1)$:

- ☐ A 1
- ☐ B 25
- ☐ C 0
- ☐ D 21



Perform the indicated operation:

$$f(x) = (2x^3 + 4x^2 + 2x + 1)$$

$$g(x) = (x + 1)$$

Find $(fg)(x)$:

☐ A $2x^4 + 6x^3 + x^2 + 3x + 1$

☐ B $2x^4 + x^3 + 6x^2 + 3x + 1$

☐ C $2x^4 + 6x^3 - 6x^2 + 3x + 1$

☐ D $2x^4 + 6x^3 + 6x^2 + 3x + 1$

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Find $(fg)(-1)$: indicated operation:

$$f(x) = (2x^3 + 4x^2 + 2x + 1)$$

$$g(x) = (x + 1)$$

Find $(fg)(-1)$:

☐ A 0

☐ B -1

☐ C 2

☐ D 11

Perform the indicated operation:

$$f(x) = (2x^3 + 2x + 1)$$

$$g(x) = (x^2 + x)$$

Find $(fg)(x)$:

☐ A $2x^5 - 2x^4 - 2x^3$

☐ B $2x^5 + 2x^4 + 2x^3 + 3x^2 + x$

☐ C $x + 3x^2 + 2x^3 + 2x^4 + 5x^6$

☐ D $2x^5 + 2x^3 + 2x^4 + x$



Perform the indicated operation:

$$f(x) = (2x^3 + 2x + 1)$$

$$g(x) = (x^2 + x)$$

Find $(fg)(1)$:

- ☒ A 1
- ☐ B 10
- ☐ C 7
- ☐ D 3

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Perform the indicated operation:

$$f(x) = (x^2 - 2)$$

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

Find $(fg)(x)$:

- ☒ A $x^2 - 3x - 2$
- ☐ B $4x - 2x^2$
- ☐ C $-2x^3 + 4x$
- ☐ D $2x + 1$