

Name : _____

Function Operations

ES3

A) 1) If $f(x) = -2x + 12$ and $g(x) = 9x^3 + 4x$,
find $f(x) + g(x)$.

2) If $f(x) = 8x^2 - x$ and $g(x) = 7x^2 + 11$,
find $(g \cdot f)(x)$.

B) If $f(x) = 6x - 5$ and $g(x) = 6x^2 + x - 5$; find the following.

i) $\frac{g(x)}{f(x)}$

ii) $f(x) - g(x)$

C) 1) If $f(x) = 10x^2 + 3$ and
find $(g + f)(-6)$.

$g(x) = -9x$,

D) If $f(x) = 5x + 1$ and $g(x)$

i) $g(5) - f(5)$

E) 1) Which of the following represents $f(x) \cdot g(x)$, if $f(x) = x^2 + x$ and $g(x) = x - 15$?

i) $x^3 - 14x^2 - 15x$

ii) $x^3 - 16x^2 - 15$

iii) $x^3 - 16x + 15$

iv) $x^3 - 14x^2 + 15x$

2) Which of the following represents $\frac{g(7)}{f(7)}$, if $f(x) = -x + 2$ and $g(x) = 9x - 13$?

i) -5

ii) 10

iii) -10

iv) 5

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Function Operations

A) 1) If $f(x) = -2x + 12$ and $g(x) = 9x^3 + 4x$,
find $f(x) + g(x)$.

$9x^3 + 2x + 12$

2) If $f(x) = 8x^2 - x$ and $g(x) = 7x^2 + 11$,
find $(g \cdot f)(x)$.

$56x^4 - 7x^3 + 88x^2 - 11x$

B) If $f(x) = 6x - 5$ and $g(x) = 6x^2 + x - 5$; find the following.

i) $\frac{g(x)}{f(x)}$

ii) $f(x) - g(x)$

$x + 1$

PREVIEW

$+ 5x$

C) 1) If $f(x) = 10x^2 + 3$ and
find $(g + f)(-6)$.

$x) = -9x,$

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D) If $f(x) = 5x + 1$ and $g(x)$

i) $g(5) - f(5)$

-3

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