

Name : _____

Function Operations

Add/Sub: ES3

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

2) If $f(x) = 5 + 6x$ and $g(x) = 10 - 3x$,
find $f(x) - g(x)$.

B) If $f(x) = 11 - x$ and $g(x) = 2x^2 + x + 11$; find the following.

i) $g(x) - f(x)$

ii) $(f + g)(x)$

C) 1) If $f(x) = -x + 8$ and $g(x) = 4x$,
find $(g + f)(-3)$.

and $g(x) = 4x$,

D) If $f(x) = -x^2$ and $g(x) = 9$

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

E) 1) Which of the following represents $f(\cdot) + g(\cdot)$, if $f(x) = -4x - 1$ and $g(x) = 2$?

i) -197

ii) 196

iii) -195

iv) 197

2) Which of the following represents $(f - g)(x)$, if $f(x) = 5 - x$ and $g(x) = 8x^3 - 15$?

i) $-x^3 - x - 10$

ii) $-8x^3 - x + 20$

iii) $8x^3 - x + 20$

iv) $x^3 - x - 10$