

Name : _____

Function Operations

Add/Sub: ES2

A) 1) If $f(x) = 3x^2 - 8$ and $g(x) = 6x^2 + 8$,
find $(f + g)(x)$.

2) If $f(x) = -x^3 + 2$ and $g(x) = x^3 - 7$,
find $g(x) - f(x)$.

B) If $f(x) = 5x + 12$ and $g(x) = -12$; find the following.

i) $f(x) + g(x)$

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

C) 1) If $f(x) = -7x^2$ and $g(x) = x^3 - 4x^2 + 3$,
find $g(5) - f(5)$.

2) If $f(x) = x^3 - 4x^2 + 3$,
find $g(x) = x^3 - 4x^2 + 3$.

D) If $f(x) = -8x + 5$ and $g(x) = x^3 - 4x^2 + 3$,
i) $(g - f)(7)$

E) 1) Which of the following represents $g(x) + f(x)$, if $f(x) = -1 + 6x$ and $g(x) = -x^2 - x + 14$?

i) $x^2 + 2x - 14$ ii) $-x^2 - 5x + 13$ iii) $x^2 + 7x + 15$ iv) $-x^2 + 5x + 13$

2) Which of the following represents $(f - g)(-9)$, if $f(x) = -x^2 + 3$ and $g(x) = -10 - x$?

i) -77 ii) -85 iii) -59 iv) -81