Gabriel [illegible] | 11 10 24

Si $f(x) = 2x^2 - 5x + 3$ $\quad g(x) = (3x-1)$ $\wedge$ $h(x) = x - 1$

Calcular: ⓐ $f(x) \circ g(x)$; ⓑ $g(x) \circ f(x)$

ⓒ $h(x) \circ f(x)$ ⓓ $f(x) \circ h(x)$

ⓐ $f(x) \circ g(x) = 2(3x-1)^2 - 5(3x-1) + 3$

$= 2(9x^2 - 2(3x)(1) + (1)^2) - 5(3x-1) + 3$

$= 2(9x^2 - 6x + 1) - 15x + 5 + 3$

$= 18x^2 - 12x + 2 - 15x + 8$

$= 18x^2 - 27x + 10$

ⓑ $g(x) \circ f(x) = (3(2x^2 - 5x + 3)) - 1$

$= 6x^2 - 15x + 9 - 1$

$= 6x^2 - 15x + 8$

ⓒ $h(x) \circ f(x) = (2x^2 - 5x + 3) - 1$

$= 2x^2 - 5x + 2$

ⓓ $f(x) \circ h(x) = 2(x-1)^2 - 5(x-1) + 3$

$= 2(x^2 - 2(x)(1) + (1)^2) - 5x + 5 + 3$

$= 2(x^2 - 2x + 1) - 5x + 8$

$= 2x^2 - 4x + 2 - 5x + 8$

$= 2x^2 - 9x + 10$