

Fill in the Blanks

Composite Two-Step Functions

Question	Input	1 st Function	2 nd Function	Output	Answer
$f(x) = 3x - 1$ $g(x) = x^2 + 5$ Find $fg(x)$	x	square → +5	× 3 →	$fg(x)$	$fg(x)$ $= 3(x^2 + 5) - 1$ $= 3x^2 + 14$
$f(x) = 2\sqrt{x}$ $g(x) = 4x - 3$ Find $gf(x)$	x	square root →	→	$gf(x)$	$= gf(x)$
$f(x) = \frac{x}{2} + 1$ $g(x) = 3x^2$ Find $fg(x)$	x	→	→	$fg(x)$	$= fg(x)$
$g(x) = \frac{1}{x-2}$ $h(x) = 4\sqrt{x}$ Find $hg(x)$	x	→	→	$hg(x)$	
$f(x) = 5x^2$ $g(x) = 2x - 1$ Find $fg(x)$	x	→	→	$fg(x)$	