

Fill in the Blanks

Three-Step Functions

Input	Function Machine			Output	Function
x	$\times 3$	-1	$\div 4$	$f(x)$	$f(x) = \frac{3x - 1}{4}$
x	$+2$	$\div 3$	square root	$f(x)$	$f(x) = \sqrt{\frac{x+2}{3}}$
x	$+3$	square	-5	$h(x)$	$h(x) = (x + 3)^2 - 5$
x	square root	$\times 4$	$+1$	$f(x)$	$f(x) = 4\sqrt{x} + 1$
x	reciprocal	-3	$\times 2$	$g(x)$	$g(x) = 2\left(\frac{1}{x} - 3\right)$
x	$\times 3$	reciprocal	-1	$f(x)$	$f(x) = \frac{1}{3x} - 1$
x	$+2$	$\div 3$	square	$f(x)$	$f(x) = \left(\frac{x+2}{3}\right)^2$
x	$\times 4$	-3	reciprocal	$g(x)$	$g(x) = \frac{1}{4x-3}$