Fill in the Blanks — Inverse Three-Step Functions

Question	Function Machines	Answer
$f(x) = \dfrac{2x+3}{5}$ Find $f^{-1}(x)$	$x \rightarrow \times 2 \rightarrow +3 \rightarrow \div 5 \rightarrow f(x)$ $f^{-1}(x) \leftarrow \div 2 \leftarrow -3 \leftarrow \times 5 \leftarrow x$	$f^{-1}(x) = \dfrac{5x-3}{2}$
$f(x) = 4x^2 - 5$ Find $f^{-1}(x)$	$x \rightarrow \text{square} \rightarrow \times 4 \rightarrow -5 \rightarrow f(x)$ $f^{-1}(x) \leftarrow \text{square root} \leftarrow \div 4 \leftarrow +5 \leftarrow x$	$f^{-1}(x) = \sqrt{\dfrac{x+5}{4}}$
$f(x) = 2\sqrt{x} + 1$ Find $f^{-1}(x)$	$x \rightarrow \text{square root} \rightarrow \times 2 \rightarrow +1 \rightarrow f(x)$ $f^{-1}(x) \leftarrow \text{square} \leftarrow \div 2 \leftarrow -1 \leftarrow x$	$f^{-1}(x) = \left(\dfrac{x-1}{2}\right)^2$
$f(x) = \left(\dfrac{x-3}{2}\right)^2$ Find $f^{-1}(x)$	$x \rightarrow -3 \rightarrow \div 2 \rightarrow \text{square} \rightarrow f(x)$ $f^{-1}(x) \leftarrow +3 \leftarrow \times 2 \leftarrow \text{square root} \leftarrow x$	$f^{-1}(x) = 2\sqrt{x} + 3$
$g(x) = \dfrac{4}{x} - 3$ Find $g^{-1}(x)$	$x \rightarrow \text{reciprocal} \rightarrow \times 4 \rightarrow -3 \rightarrow g(x)$ $g^{-1}(x) \leftarrow \text{reciprocal} \leftarrow \div 4 \leftarrow +3 \leftarrow x$	$g^{-1}(x) = \dfrac{1}{4(x+3)}$