

Fill in the Blanks

Harder Inverse Functions

$f(x)$	Write as $y = \dots$	Swap x and y	Make y the subject				Write as $f^{-1}(x) = \dots$
$f(x) = \frac{x}{x+2}$	$y = \frac{x}{x+2}$	$x = \frac{y}{y+2}$	$xy + 2x = y$	$2x = y - xy$	$2x = y(1 - x)$	$y = \frac{2x}{1 - x}$	$f^{-1}(x) = \frac{2x}{1 - x}$
$f(x) = \frac{x-3}{x}$							
$f(x) = \frac{x}{2x+1}$							
$f(x) = \frac{3x}{x-5}$							
$f(x) = \frac{x+2}{x-1}$							
$f(x) = \frac{x+3}{x+1}$							
$f(x) = \frac{2x+1}{3-x}$							
$f(x) = \frac{5-2x}{x-3}$							