Composite Functions

$f(x)$	$g(x)$	$fg(x)$	$gf(x)$
$f(x) = x - 3$	$g(x) = x^2$	$fg(x) = x^2 - 3$	$gf(x) = (x - 3)^2$
$f(x) = \dfrac{x}{5}$	$g(x) = x + 1$		
$f(x) = 3x$	$g(x) = 7 - x$		
$f(x) = \sqrt{x}$	$g(x) = \dfrac{x}{4}$		
$f(x) = 2x + 9$	$g(x) = x - 3$	$fg(x) = 2x + 3$	
$f(x) = x^2 - 1$	$g(x) = \dfrac{x}{3}$		
$f(x) = \sqrt{x}$	$g(x) = 4 - 3x$		
$f(x) = \dfrac{2x}{5}$	$g(x) = x^2$		$gf(x) = \dfrac{4x^2}{25}$
$f(x) = \dfrac{1}{x}$	$g(x) = 2x - 3$		
$f(x) = 9 - x$	$g(x) = \sqrt{2x}$		
$f(x) = 3x - 1$	$g(x) = \dfrac{2}{x + 1}$		
	$g(x) = x - 3$	$fg(x) = \dfrac{x - 3}{10}$	
$f(x) = 2x + 1$		$fg(x) = 2x^3 + 1$	
		$fg(x) = \dfrac{1}{x^2 + 2}$	$gf(x) = \dfrac{1}{x^2} + 2$