$$f(x) = x + 2$$

Given $g(x) = \frac{1}{x} + x$ Find the combination of the functions. $h(x) = (x-2)^2$

$$h(x) = (x-2)^2$$

$(\frac{f}{g \circ h})(x)$	$\frac{(x+2)(x-2)^2}{(x-2)^4+1}$
$(\frac{1}{g} + \frac{f}{h})(x)$	$\frac{2x^3 - 2x^2 + 5x + 2}{(x^2 + 1)(x - 2)^2}$
$\left(\frac{fg}{h}\right)(x)$	$\frac{(x^2+1)(x+2)}{x^2(x-2)^2}$
$[g \circ (h \circ f)]$	$x^2 + \frac{1}{x^2}$
$[(f\circ g)\circ h]$	$\frac{x^2 + \frac{1}{x^2}}{\frac{1}{(x-2)^2} + (x-2)^2 + 2}$
$\left(\frac{1}{f} + \frac{h}{g}\right)(x)$	$\frac{x^4 - 2x^3 - 3x^2 + 8x + 1}{(x^2 + 1)(x + 2)}$
$[h \circ (g \circ f)](x)$	$\frac{(x+1)^4}{(x+2)^2}$
$\left(\frac{h}{f\circ g}\right)(x)$	$\frac{x(x-2)}{(x+1)^2}$