Evaluating Composite Functions

Find the values of the following, given that:

$$f(x) = 4x + 5$$
$$g(x) = 5 - 4x$$
$$h(x) = 2x^2$$

	$fg(x)$	$gf(x)$	$ff(x)$	$gg(x)$	$hg(x)$	$gfh(x)$
$x = 1$						
$x = 2$						
$x = -2$						
$x = \frac{1}{2}$						
$x = -\frac{1}{2}$						
	121					
			-23			
		$-\frac{77}{3}$				

Evaluating Composite Functions:

ANSWERS

	$fg(x)$	$gf(x)$	$ff(x)$	$gg(x)$	$hg(x)$	$gfh(x)$
$x = 1$	9	-31	41	1	2	-47
$x = 2$	-7	-7	57	17	18	-143
$x = -2$	57	17	-7	-47	338	-143
$x = \frac{1}{2}$	17	-23	33	-7	18	-23
$x = -\frac{1}{2}$	33	-7	17	-23	98	-23
$x = -6$	121	81	-56	-111	1682	-1167
$x = -3$	73	33	-23	-63	578	-303
$x = \frac{2}{3}$	$\frac{43}{3}$	$-\frac{77}{3}$	$\frac{107}{3}$	$-\frac{13}{3}$	$\frac{98}{9}$	$-\frac{263}{9}$