Evaluating Functions:

Find the values of:

$f(3), f(-5)$ and $f\left(\frac{1}{2}\right)$ for the following functions:

	$f(3)$	$f(-5)$	$f(\frac{1}{2})$
$f(x) = x + 5$			
$f(x) = 2x + 5$			
$f(x) = \frac{x}{2} + 5$			
$f(x) = \frac{x}{2} + 5x$			
$f(x) = x^2 + 5x$			
$f(x) = 5x^2$			
$f(x) = \frac{5}{x^2}$			
$f(x) = \frac{1}{5x^2}$			
$f(x) =$	16	-24	$\frac{7}{2}$
	7		
		$\frac{25}{2}$	
			-11

For the last three questions, find a possible function for $f(x)$, and therefore, find $f(3), f(-5)$ and $f\left(\frac{1}{2}\right)$.

Evaluating Functions:

ANSWERS

	$f(3)$	$f(-5)$	$f(\frac{1}{2})$
$f(x) = x + 5$	8	0	$\frac{11}{2}$
$f(x) = 2x + 5$	11	-5	6
$f(x) = \frac{x}{2} + 5$	$\frac{11}{2}$	$\frac{5}{2}$	$\frac{21}{4}$
$f(x) = \frac{x}{2} + 5x$	$\frac{33}{2}$	$-\frac{55}{2}$	$\frac{11}{4}$
$f(x) = x^2 + 5x$	24	50	$\frac{11}{4}$
$f(x) = 5x^2$	45	125	$\frac{5}{4}$
$f(x) = \frac{5}{x^2}$	$\frac{5}{9}$	$\frac{1}{5}$	20
$f(x) = \frac{1}{5x^2}$	$\frac{1}{45}$	$\frac{1}{125}$	$\frac{4}{5}$
$f(x) = 5x + 1$	16	-24	$\frac{7}{2}$
	7		
		$\frac{25}{2}$	
			-11