

Piecewise Functions

Evaluate the piecewise defined function at the indicated values.

1. $f(x) = \begin{cases} x & x < 0 \\ x + 1 & x \geq 0 \end{cases}$	$f(-2) =$	$f(0) =$	$f(2) =$
	$f(-1) =$	$f(1) =$	
2. $f(x) = \begin{cases} 5 & x \leq 2 \\ 2x - 3 & x > 2 \end{cases}$	$f(-3) =$	$f(2) =$	$f(5) =$
	$f(0) =$	$f(3) =$	
3. $f(x) = \begin{cases} x^2 + 2x & x \leq -1 \\ x & -1 < x \leq 1 \\ -1 & x > 1 \end{cases}$	$f(-4) =$	$f(-1) =$	$f(25) =$
	$f(-\frac{3}{2}) =$	$f(0) =$	
4. $f(x) = \begin{cases} 3x & x < 0 \\ x + 1 & 0 \leq x \leq 2 \\ (x - 2)^2 & x > 2 \end{cases}$	$f(-5) =$	$f(1) =$	$f(5) =$
	$f(0) =$	$f(2) =$	
5. $f(x) = \begin{cases} -2 x + 1 & x \leq 1 \\ 3 & 1 < x < 3 \\ 6 - 2x & x \geq 3 \end{cases}$	$f(10) =$	$f(2) =$	$f(0) =$
	$f(-1) =$	$f(3) =$	
6. $f(x) = \begin{cases} x^2 - 3x + 10 & x \leq 4 \\ -x^2 + 6x + 16 & x > 4 \end{cases}$	$f(5) =$	$f(-2) =$	$f(3.9) =$
	$f(\frac{15}{4}) =$	$f(\frac{29}{7}) =$	
7. $f(x) = \begin{cases} x^3 + 4x - 6 & x \leq -3 \\ 6x - 7 & -3 < x \leq 2 \\ \sqrt{x - 2} & x > 2 \end{cases}$	$f(-6) =$	$f(-3) =$	$f(2) =$
	$f(2.5) =$	$f(0) =$	