Pre-Calculus
Section 1.2 Part III Worksheet

Date _____

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