Functions 7b – Domains for Functions Defined Symbolically **Name _____**
Homework #2 – Mixed Practice **Per _____ Date _____**

For each function, state the restriction and the inequality or equation that must be solved in order to identify the domain. Then solve the inequality or equation and state the domain using set notation.

Function:	**Restriction:**	**Equation or Inequality/Solution:**
1) $f(x)=\frac{1}{x-3}$		
Domain:		
Function:	**Restriction:**	**Equation or Inequality/Solution:**
2) $f(x)=\sqrt{x-3}$		
Domain:		

Function:	**Restriction:**	**Equation or Inequality/Solution:**
3) $f(x)=\frac{1}{5-4x}$		
Domain:		
Function:	**Restriction:**	**Equation or Inequality/Solution:**
4) $f(x)=\sqrt{5-4x}$		
Domain:		

Function:	**Restriction:**	**Equation or Inequality/Solution:**
5) $f(x)=\frac{1}{x^2-36}$		
Domain:		
Function:	**Restriction:**	**Equation or Inequality/Solution:**
6) $f(x)=\sqrt{x^2-36}$		
Domain:		

Function: **7)** $f(x)=\dfrac{1}{x^2-x-12}$	**Restriction:**	**Equation or Inequality/Solution:**
Domain:		
Function: **8)** $f(x)=\sqrt{x^2-x-12}$	**Restriction:**	**Equation or Inequality/Solution:**
Domain:		

Function: **9)** $f(x)=\dfrac{1}{x^2-6x+9}$	**Restriction:**	**Equation or Inequality/Solution:**
Domain:		
Function: **10)** $f(x)=\sqrt{x^2-6x+9}$	**Restriction:**	**Equation or Inequality/Solution:**
Domain:		