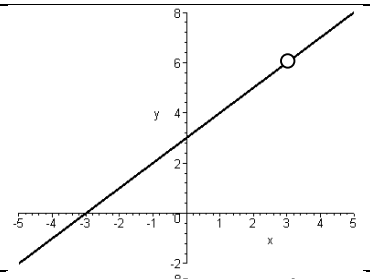
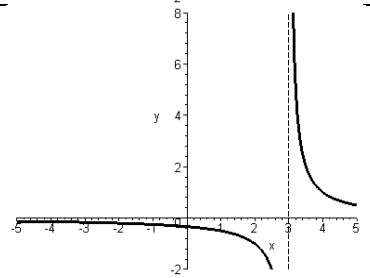
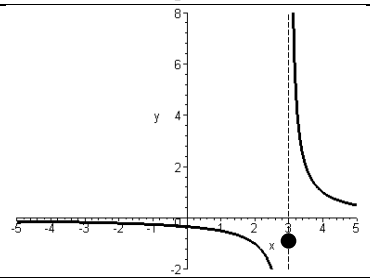
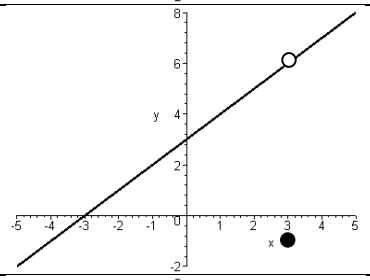
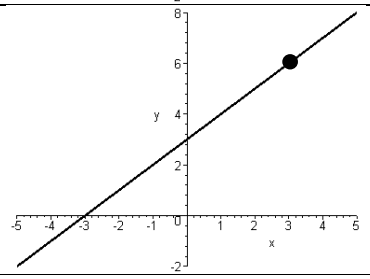
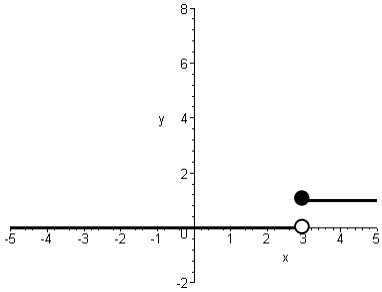
Continuity Preparation

Have completed by tomorrow (beginning of class): From the graphs below, write down the domain of each function and then answer the questions in the columns labeled 1-3. Make an educated guess about whether the function is continuous at $x = 3$.

Graph	**Function** *What is the domain?*	1 *What is* $f(3)$?	2 *What is* $\lim_{x\to 3} f(x)$?	3 *Does* $f(3) = \lim_{x\to 3} f(x)$?	*Is f continuous at* $x = 3$?
	$f(x) = \dfrac{x^2 - 9}{x - 3}$				
	$f(x) = \dfrac{1}{x - 3}$				
	$f(x) = \begin{cases} \dfrac{1}{x-3}, & x \neq 3 \\ -1, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} \dfrac{x^2-9}{x-3}, & x \neq 3 \\ -1, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} \dfrac{x^2-9}{x-3}, & x \neq 3 \\ 6, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} 0, & x < 3 \\ 1, & x \geq 3 \end{cases}$				