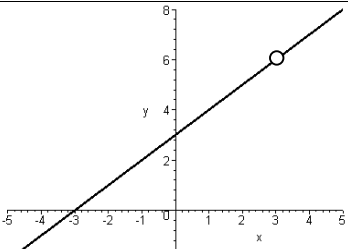
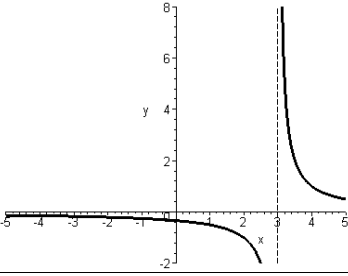
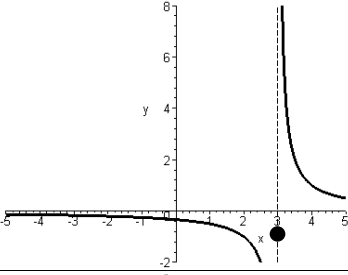
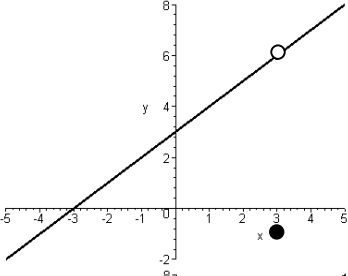
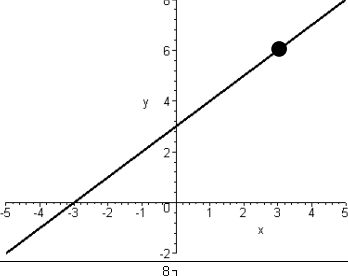
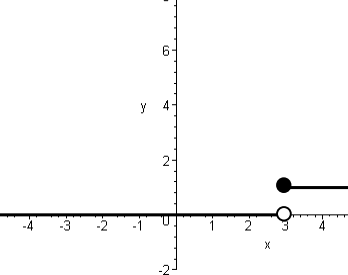


## Continuity Preparation

~~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  $x = 3$ .

<b>Graph</b>	<b>Function</b> <i>What is the domain?</i>	<b>1</b> <i>What is <math>f(3)</math>?</i>	<b>2</b> <i>What is <math>\lim_{x \rightarrow 3} f(x)</math>?</i>	<b>3</b> <i>Does <math>f(3) = \lim_{x \rightarrow 3} f(x)</math>?</i>	<i>Is <math>f</math> continuous at <math>x = 3</math>?</i>
	$f(x) = \frac{x^2 - 9}{x - 3}$				
	$f(x) = \frac{1}{x - 3}$				
	$f(x) = \begin{cases} \frac{1}{x-3}, & x \neq 3 \\ -1, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} \frac{x^2 - 9}{x - 3}, & x \neq 3 \\ -1, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} \frac{x^2 - 9}{x - 3}, & x \neq 3 \\ 6, & x = 3 \end{cases}$				
	$f(x) = \begin{cases} 0, & x < 3 \\ 1, & x \geq 3 \end{cases}$				