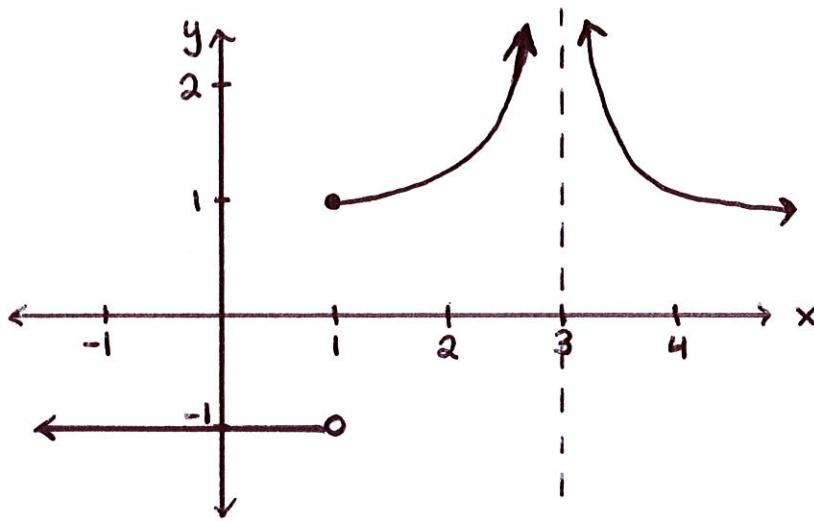


MA 16010  
QUIZ 2  
8/29/2018

1. Find (a)  $\lim_{x \rightarrow 1^-} f(x) = -1$

(b)  $\lim_{x \rightarrow 3} f(x) = \infty$



2. Find  $\lim_{x \rightarrow 1} \frac{x^2 - 2x + 1}{x^2 - 1}$ . (Evaluate analytically)

Factor:  $\frac{x^2 - 2x + 1}{x^2 - 1} = \frac{(x-1)(x-1)}{(x-1)(x+1)} = \frac{0}{0}$

Hole at  $x = 1$ .

$$\lim_{x \rightarrow 1} \frac{x-1}{x+1} = \frac{1-1}{1+1} = \frac{0}{2} = 0.$$