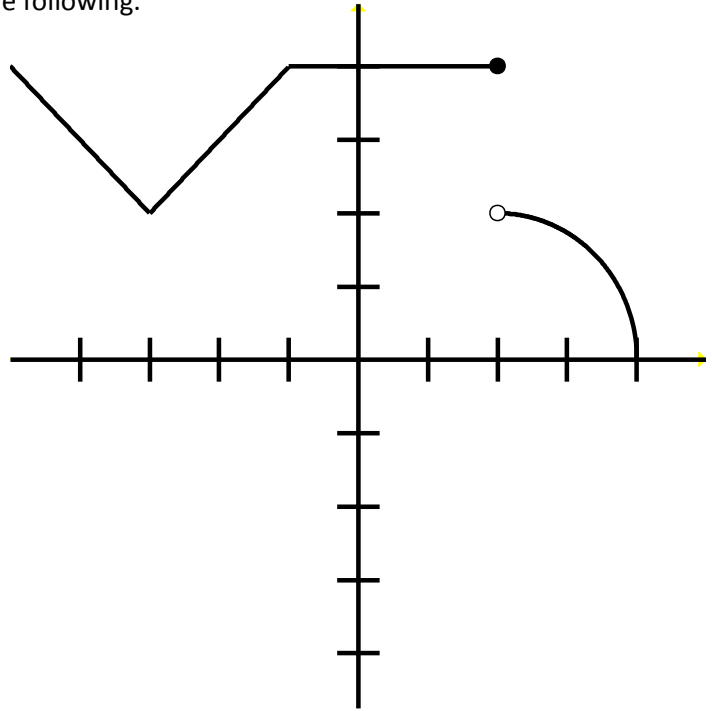


1) Using the graph of $y = f(x)$ to the right, find each of the following.

$$\lim_{x \rightarrow 2^-} f(x) = 4$$

$$\lim_{x \rightarrow 1} f(x) = 4$$

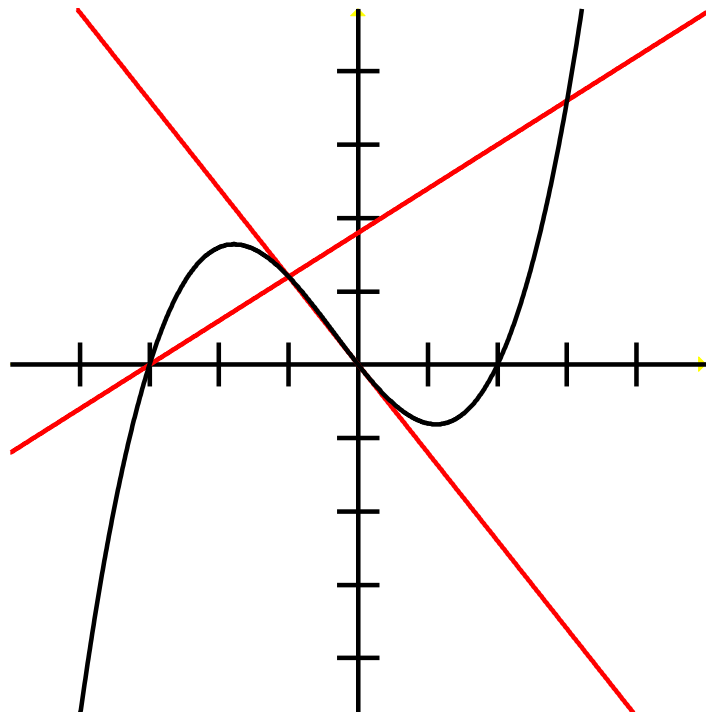
$$\lim_{x \rightarrow 2} f(x) = \text{Does not exist}$$



2) Find $\lim_{x \rightarrow 3} \frac{x^2 - x + 2}{x - 1} = \frac{3^2 - 3 + 2}{3 - 1} = \frac{8}{2} = 4$

3) Use the graph to the right to estimate the average rate of change between $x = -1$ and $x = 3$.

It looks to be approximately $2/3$ rds.
 (True answer: 0.6. Full credit for anything between 0.3 and 0.9)



4) Use the graph to the right to estimate the instantaneous rate of change at $x = 0$.

It looks to be approximately -1 .
 (True answer: -1.2 . Full credit for anything between -0.8 and -1.6)