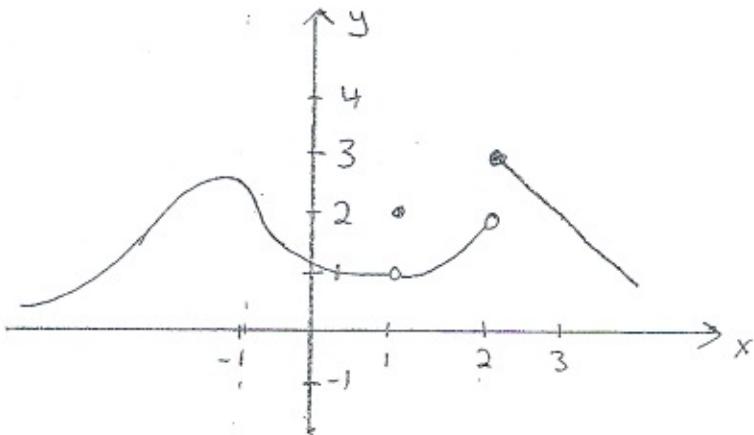


# Worksheet #2

Name \_\_\_\_\_  
PID \_\_\_\_\_

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- b) Compute the limits, if the graph of  $y = g(x)$  is given as follows,



- a)  $\lim_{x \rightarrow -1} g(x)$       b)  $\lim_{x \rightarrow 1} g(x)$       c)  $\lim_{x \rightarrow 2} g(x)$

**D** Define

$$f(x) = \begin{cases} x^2 - 1 & \text{if } x \leq 2 \\ x + 1 & \text{if } x > 2 \end{cases}$$

Compute the following limits or explain why they don't exist:

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

b)  $\lim_{x \rightarrow 2^+} f(x)$

c)  $\lim_{x \rightarrow 2} f(x)$