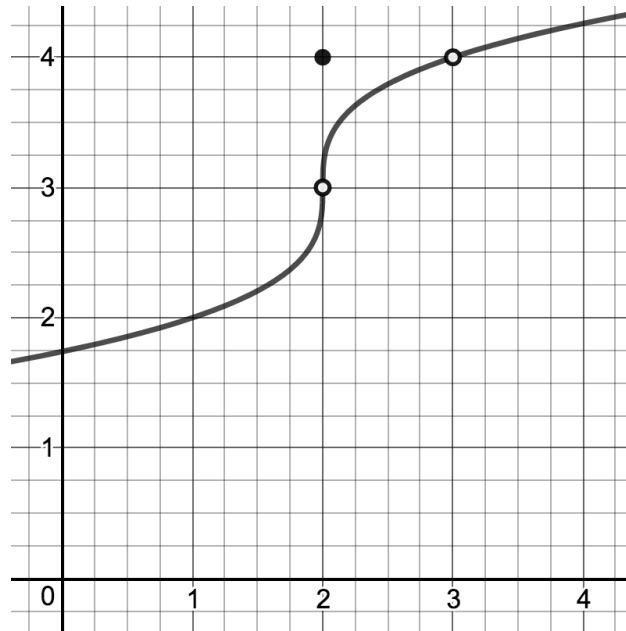


§2.2: DEFINITION OF LIMIT

1.] Given the graph of $f(x)$ below, determine the limits:



a.) $\lim_{x \rightarrow 1} f(x)$

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

e.) $\lim_{x \rightarrow 3} f(x)$

b.) $f(1)$

d.) $f(2)$

f.) $f(3)$

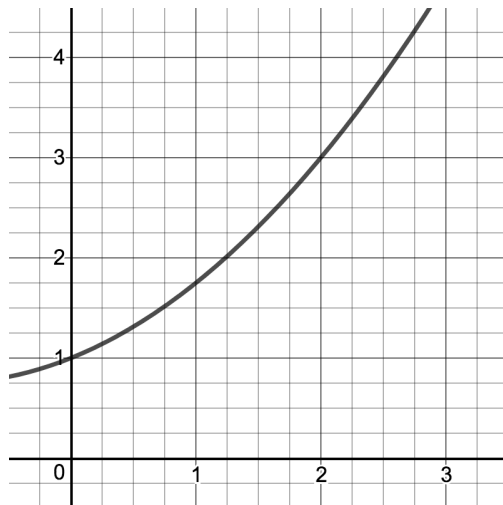
2.] Let $f(x) = \frac{1 - \cos(x)}{x}$.

a.) What is $f(0)$?

b.) Evaluate this limit $\lim_{x \rightarrow 0} f(x)$ using the table below.

x	-0.1	-0.01	-0.001	0	0.001	0.01	0.1
$f(x)$				*			

3.] Given the graph of $f(x)$ below, determine the limits:



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

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

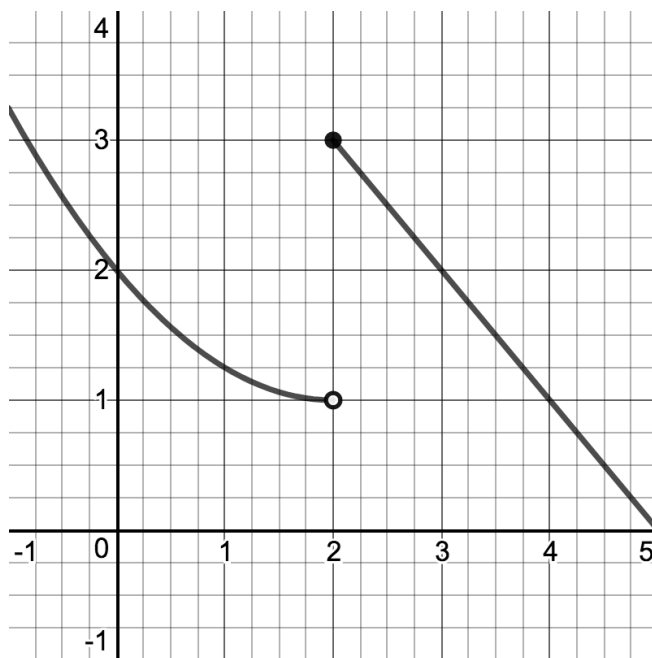
e.) $f(1.9999)$

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

d.) $f(2)$

f.) $f(2.0001)$

4.] Given the graph of $f(x)$ below, determine the limits:



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

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

e.) $\lim_{x \rightarrow 3} f(x)$

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

d.) $f(2)$

f.) $f(3)$