

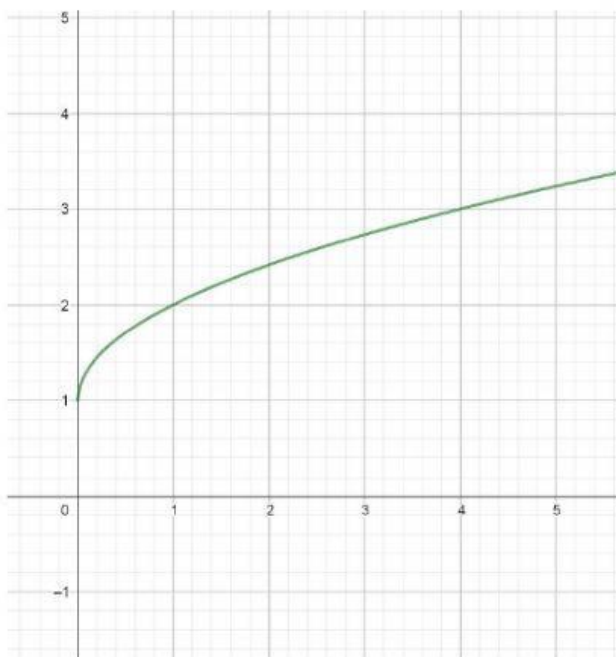
UNIDAD 7

LÍMITES Y CONTINUIDAD

CONCEPTO DE LÍMITE. Ejercicios

1.- Escribe el valor de los límites que se indican para las siguientes funciones:

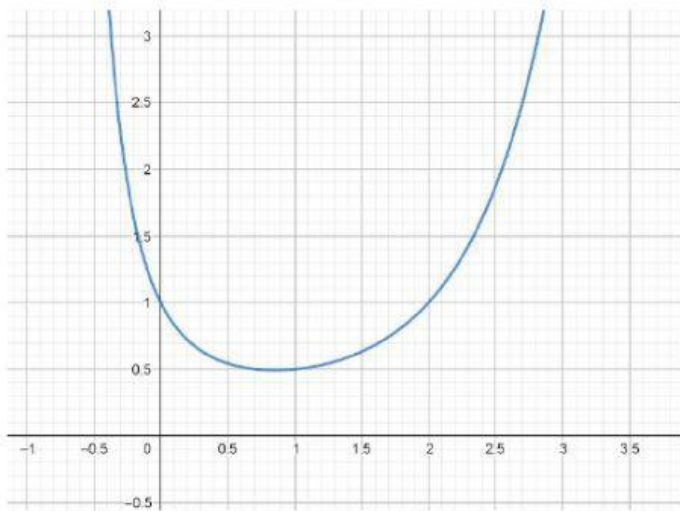
(Si alguno no existe, escribe NO) (si alguno es infinito, escribe INFINITO) ( si algunos es menos infinito, escribe -INFINITO)



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

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

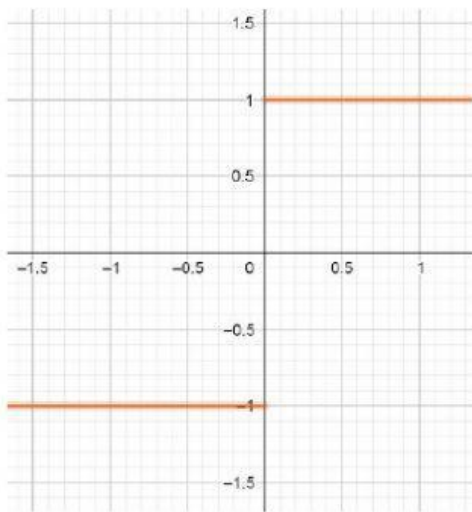
$$\lim_{x \rightarrow 2} f(x) =$$



$$\lim_{x \rightarrow 0^+} f(x) =$$

$$\lim_{x \rightarrow 0^-} f(x) =$$

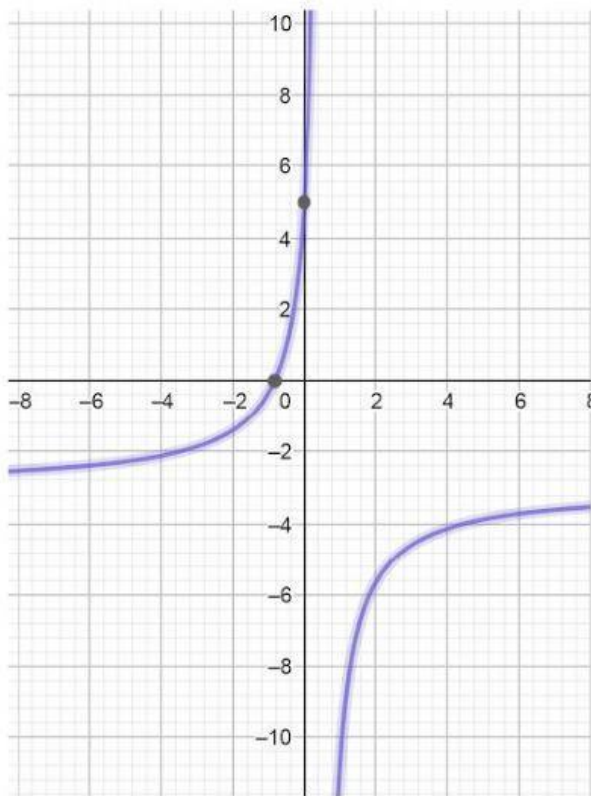
$$\lim_{x \rightarrow 0} f(x) =$$



$$\lim_{x \rightarrow 0^+} f(x) =$$

$$\lim_{x \rightarrow 0^-} f(x) =$$

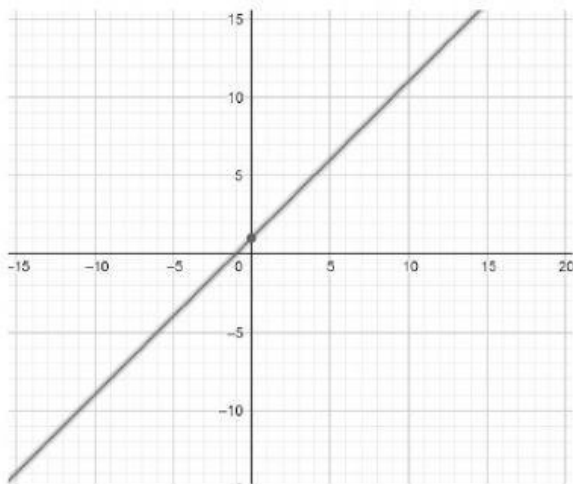
$$\lim_{x \rightarrow 0} f(x) =$$



$$\lim_{x \rightarrow -0.8^-} f(x) =$$

$$\lim_{x \rightarrow -0.8^+} f(x) =$$

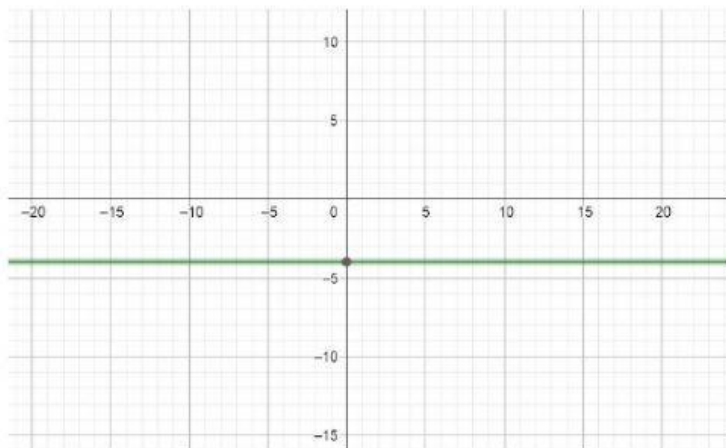
$$\lim_{x \rightarrow -0.8} f(x) =$$



$$\lim_{x \rightarrow 10^+} f(x) =$$

$$\lim_{x \rightarrow 10^-} f(x) =$$

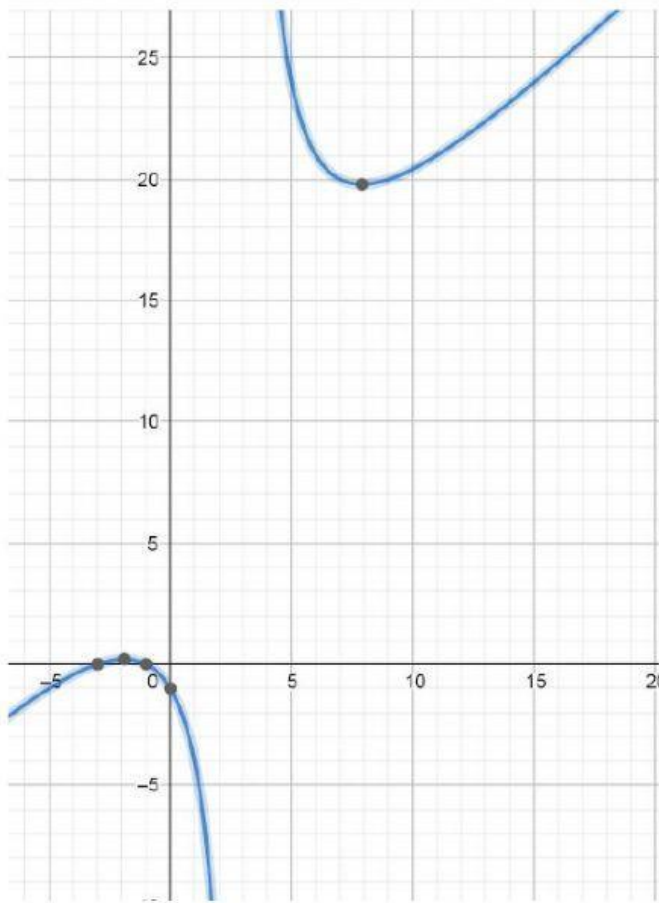
$$\lim_{x \rightarrow 10} f(x) =$$



$$\lim_{x \rightarrow -3^+} f(x) =$$

$$\lim_{x \rightarrow -3^-} f(x) =$$

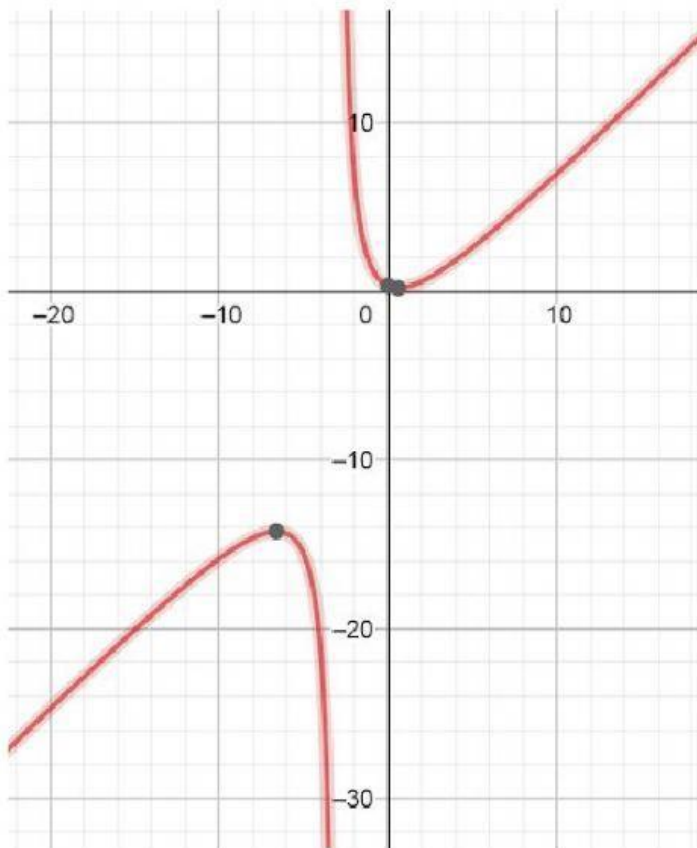
$$\lim_{x \rightarrow -3} f(x) =$$



$$\lim_{x \rightarrow 5^-} f(x) =$$

$$\lim_{x \rightarrow 5^+} f(x) =$$

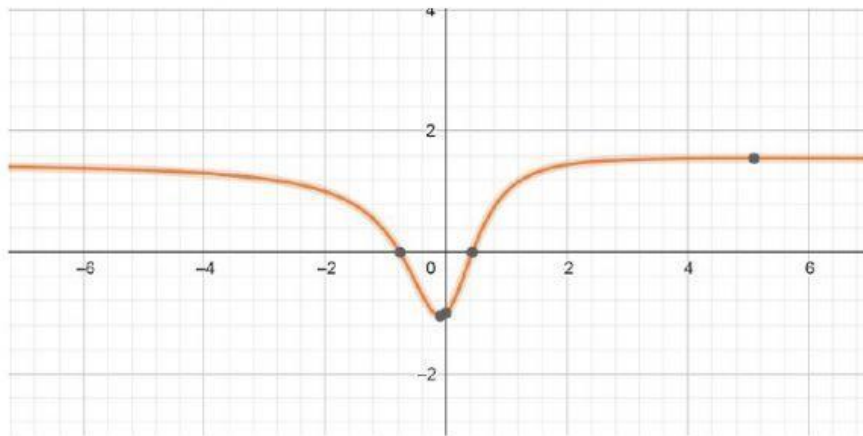
$$\lim_{x \rightarrow 5} f(x) =$$



$$\lim_{x \rightarrow -3^+} f(x) =$$

$$\lim_{x \rightarrow -3^-} f(x) =$$

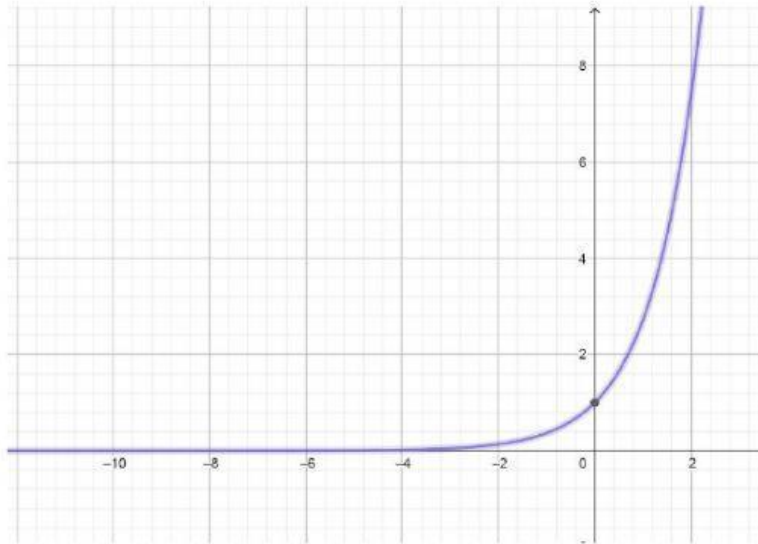
$$\lim_{x \rightarrow -3} f(x) =$$



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

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

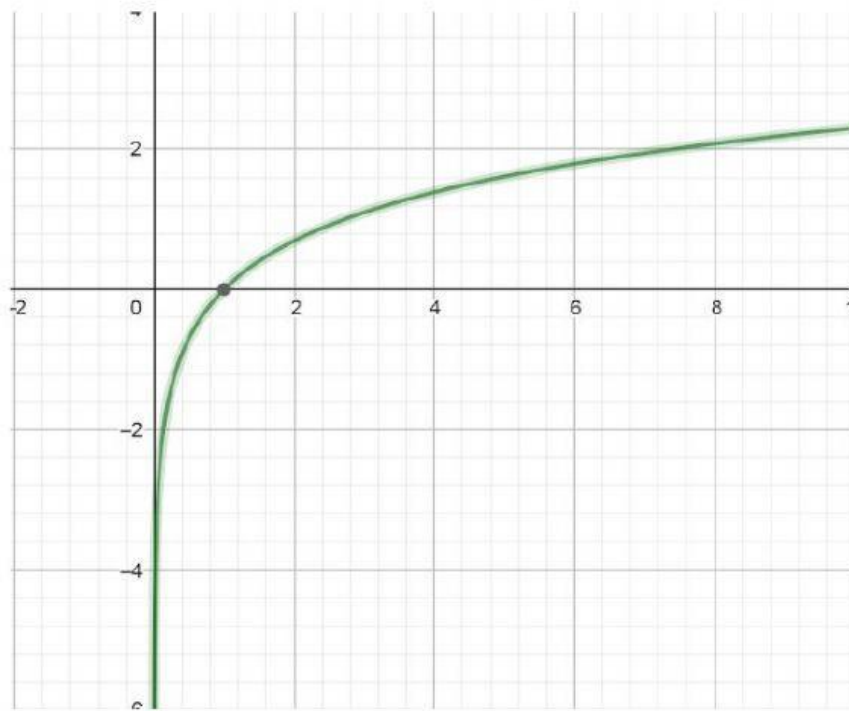
$$\lim_{x \rightarrow -4} f(x) =$$



$$\lim_{x \rightarrow 0^+} f(x) =$$

$$\lim_{x \rightarrow 0^-} f(x) =$$

$$\lim_{x \rightarrow 0} f(x) =$$



$$\lim_{x \rightarrow 0^+} f(x) =$$

$$\lim_{x \rightarrow 0^-} f(x) =$$

$$\lim_{x \rightarrow 0} f(x) =$$



2.- Completa las tablas de valores y deduce el límite que se pide:

(Si hay decimales, aproxímalos a las centésimas por redondeo)

a)  $f(x) = 3x^2 - 3x + 2$

x	1,9	1,99	1,999	2,1	2,01	2,001
f(x)						

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

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

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

b)  $f(x) = \{3x^2 \text{ si } x \leq 2\} \{3x + 1 \text{ si } 2 < x < 4\}$

x	1,9	1,99	1,999	2,1	2,01	2,001
f(x)						

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

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

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

c)  $f(x) = \frac{3x^2}{x^2 - 4}$

x	1,9	1,99	1,999	2,1	2,01	2,001
f(x)						

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

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

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

b)  $f(x) = \{x^2 - 1 \text{ si } x \leq 2\} \{3x - 3 \text{ si } 2 < x < 4\}$

x	1,9	1,99	1,999	2,1	2,01	2,001
f(x)						

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

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

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