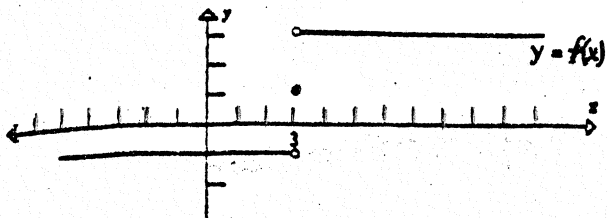


TO ∞ AND BEYOND!

For each of the following, write the test of continuity which it fails. In the unlikely event the function is continuous, write "continuous."

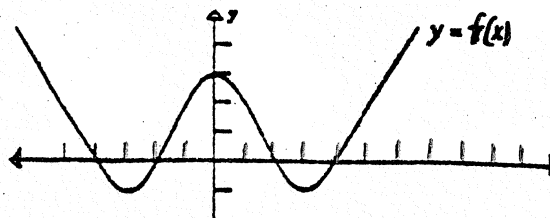
$$\begin{aligned} \lim_{x \rightarrow 3^-} f(x) &= \\ \lim_{x \rightarrow 3} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 3^+} f(x) &= \\ f(3) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



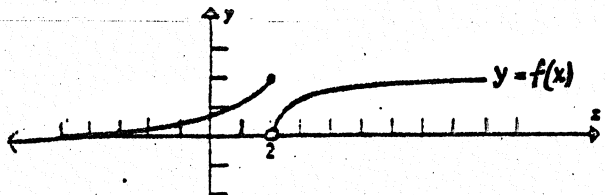
$$\begin{aligned} \lim_{x \rightarrow 0^-} f(x) &= \\ \lim_{x \rightarrow 0} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 0^+} f(x) &= \\ f(0) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



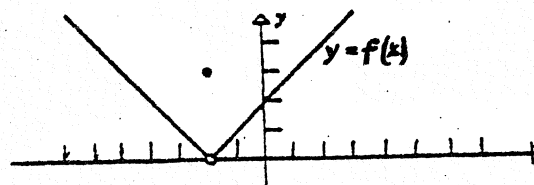
$$\begin{aligned} \lim_{x \rightarrow 2^-} f(x) &= \\ \lim_{x \rightarrow 2} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 2^+} f(x) &= \\ f(2) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



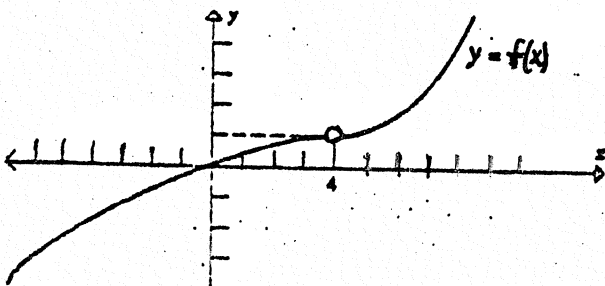
$$\begin{aligned} \lim_{x \rightarrow -2^-} f(x) &= \\ \lim_{x \rightarrow -2} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow -2^+} f(x) &= \\ f(-2) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



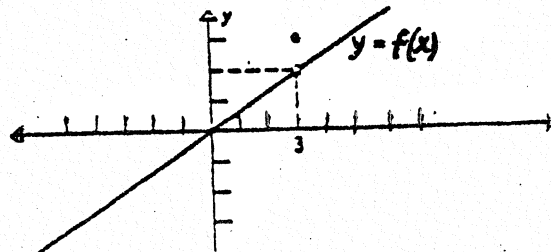
$$\begin{aligned} \lim_{x \rightarrow 4^-} f(x) &= \\ \lim_{x \rightarrow 4} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 4^+} f(x) &= \\ f(4) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



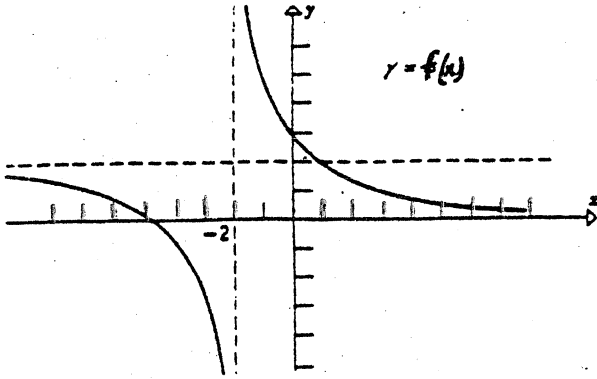
$$\begin{aligned} \lim_{x \rightarrow 3^-} f(x) &= \\ \lim_{x \rightarrow 3} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 3^+} f(x) &= \\ f(3) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



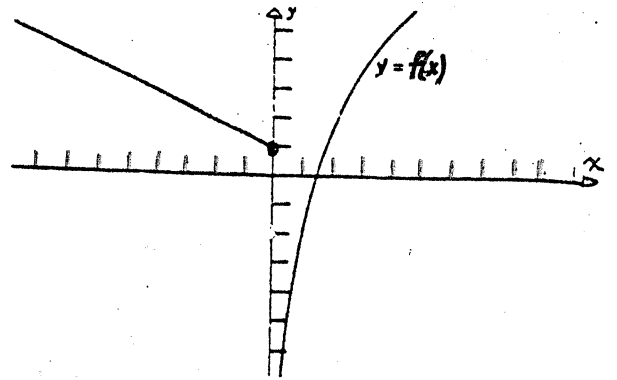
$$\begin{aligned} \lim_{x \rightarrow 2^-} f(x) &= \\ \lim_{x \rightarrow 2} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 2^+} f(x) &= \\ f(2) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



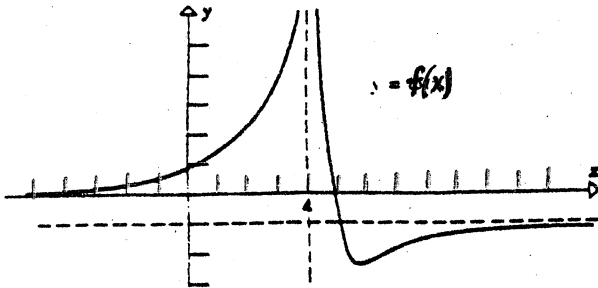
$$\begin{aligned} \lim_{x \rightarrow 0^-} f(x) &= \\ \lim_{x \rightarrow 0} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 0^+} f(x) &= \\ f(0) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



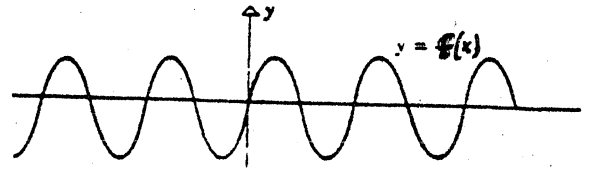
$$\begin{aligned} \lim_{x \rightarrow 4^-} f(x) &= \\ \lim_{x \rightarrow 4} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 4^+} f(x) &= \\ f(4) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



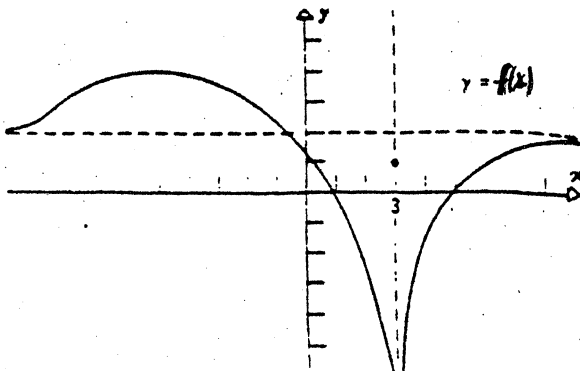
$$\begin{aligned} \lim_{x \rightarrow 0^-} f(x) &= \\ \lim_{x \rightarrow 0} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 0^+} f(x) &= \\ f(0) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



$$\begin{aligned} \lim_{x \rightarrow 3^-} f(x) &= \\ \lim_{x \rightarrow 3} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 3^+} f(x) &= \\ f(3) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$



$$\begin{aligned} \lim_{x \rightarrow 0^-} f(x) &= \\ \lim_{x \rightarrow 0} f(x) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

$$\begin{aligned} \lim_{x \rightarrow 0^+} f(x) &= \\ f(0) &= \\ \lim_{x \rightarrow \infty} f(x) &= \end{aligned}$$

