

Station: Limits Numerically

1. Find $\lim_{x \rightarrow 3^-} f(x)$, $\lim_{x \rightarrow 3^+} f(x)$, and $\lim_{x \rightarrow 3} f(x)$ where $f(x) = \frac{1}{x-3}$.

x							
$f(x)$							

2. Find $\lim_{x \rightarrow -2^-} f(x)$, $\lim_{x \rightarrow -2^+} f(x)$, and $\lim_{x \rightarrow -2} f(x)$ where $f(x) = \frac{x^2 - x - 6}{x + 2}$.

x							
$f(x)$							

3. Find $\lim_{x \rightarrow 0^-} f(x)$, $\lim_{x \rightarrow 0^+} f(x)$, and $\lim_{x \rightarrow 0} f(x)$ where $f(x) = \begin{cases} x + 1 & x < 0 \\ x^2 & x \geq 0 \end{cases}$

x							
$f(x)$							