

$$\lim_{x \rightarrow 8} \frac{x^2 - 64}{x^2 - 7x - 8}$$

x	f(x)
7.9	1.786516854
7.99	1.778642937
7.999	1.777864207
8.1	1.769230769
8.01	1.776914539
8.001	1.777691368

Estimating the Limit of a function

1. We select values approaching 8 from the left and right that are slightly greater and less than $x = 8$.
2. Look for a pattern in the estimated limits.
3. Since the limit approaches 1.78, we can estimate the limit of this function to be 1.78