

Introduction to Limits

1. $\lim_{x \rightarrow 1} \frac{x^3 - 1}{x - 1}$

5. $\lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1}$

2. $\lim_{x \rightarrow 0} \frac{5 \sin 2x}{x}$

6. $\lim_{x \rightarrow \pi^+} \csc x$

3. $\lim_{x \rightarrow 2} \frac{1 - \sqrt{x-1}}{x-2}$

7. $\lim_{x \rightarrow 4} \frac{\sqrt{x} - 2}{x - 4}$

4. $\lim_{x \rightarrow 3} \frac{x-1}{\sqrt{x+6}-3}$

8. $\lim_{x \rightarrow 4^-} \frac{x^2 + x - 20}{x^2 - 6x - 7}$