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Compute the following limits:

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

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

1.  $\lim_{x \rightarrow 2} \frac{x^3 - 1}{x^2 - 1} = \frac{8 - 1}{4 - 1} = \frac{7}{3}$

2.  $\lim_{x \rightarrow 1} \frac{x^3 - 1}{x^2 - 1} = \lim_{x \rightarrow 1} \frac{x^2 + x + 1}{x + 1} = \frac{3}{2}$