

1. (a) $\lim_{x \rightarrow 0} \frac{x^2 - 1}{2x^2 + 1};$ (b) $\lim_{x \rightarrow 2} \sqrt{2x + 5};$
(c) $\lim_{x \rightarrow 2} \frac{x^2 - 5x + 6}{x^3 - 2x^2 - x + 2};$ (d) $\lim_{x \rightarrow -\infty} \frac{x^2 - 1}{2x^2 + 1}.$
2. (a) $\lim_{x \rightarrow 1} \left(\frac{1}{x - 1} - \frac{3}{x^3 - 1} \right);$ (b) $\lim_{x \rightarrow 1} \left(\frac{1}{x - 1} - \frac{2}{x^3 - 1} \right);$
3. (a) $\lim_{x \rightarrow 0} \frac{\sin 2x}{\operatorname{tg} 5x};$
(c) $\lim_{x \rightarrow 0} \frac{1 - \cos x}{x}.$