

## SET TWO: Exercises on Limits – Algebraic

Evaluate each limit.

$$[1] \lim_{x \rightarrow 2} \frac{x-2}{x^2-4}$$

$$[2] \lim_{x \rightarrow -4} \frac{2x^2+5x-12}{3x^2+11x-4}$$

$$[3] \lim_{x \rightarrow 1} \frac{2x^2-x-1}{2x^2+x-3}$$

$$[4] \lim_{x \rightarrow 5} \frac{x^2-10x+25}{x-5}$$

$$[5] \lim_{x \rightarrow 0} \frac{(2+x)^3-8}{x}$$

$$[6] \lim_{x \rightarrow 1} \frac{(3x-4)^2-1}{x-1}$$

$$[7] \lim_{x \rightarrow 0} \frac{\sqrt{4+x}-2}{x}$$

$$[8] \lim_{x \rightarrow 0} \frac{\frac{1}{x+2} - \frac{1}{2}}{x}$$

$$[i] \lim_{x \rightarrow 0} \frac{3-\sqrt{9-x}}{x}$$

$$[9] \lim_{x \rightarrow 0} \frac{\frac{2}{x-3} + \frac{2}{3}}{x}$$