

# Calculus - Limits

## Grade 11 | Difficulty: Easy

1. Evaluate the limit:  $\lim_{x \rightarrow 0} (\sin x / x)$ .
2. Find the limit:  $\lim_{x \rightarrow 2} (x^2 - 4) / (x - 2)$ .
3. Determine the horizontal asymptote of  $f(x) = (2x^2 + 3) / (x^2 - 1)$ .
4. Check if the function  $f(x) = 1/x$  is continuous at  $x = 0$ .
5. Find the left-hand and right-hand limits of  $f(x) = |x|$  at  $x = 0$ .