

# Calculus - Introduction

## Grade 10 | Difficulty: Easy

1. Find the derivative of  $f(x) = 3x^2 + 2x - 1$ .
2. Evaluate the limit:  $\lim_{x \rightarrow 0} (x^2 - 4)/(x - 2)$ .
3. Find the integral of  $f(x) = 2x + 3$ .
4. Differentiate:  $y = x^3 - 2x + 4$ .
5. Find the slope of the tangent to  $y = x^2 + 2x$  at  $x = 2$ .