

12H Second Derivatives

1. Find $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ of the following:

$$y = 3x^5 + \frac{4}{x^2}$$

2. Find $f'(x)$ and $f''(x)$ of the following:

$$f(x) = 3\sqrt{x} + \frac{1}{2x}$$