

## Практическая работа

### 1. Найдите производную функции

$$y = x^2;$$

$$y = x^5;$$

$$y = x^{201}$$

$$y = 7x + 4;$$

$$y = x^2 - 7x;$$

$$y = 7x^2 + 3x;$$

$$y = -x^2 + 8x.$$

$$y = x^3 + 4x^{100};$$

$$y = x^4 - 7x^9.$$

$$y = (x^2 - 1)(x^4 + 2);$$

$$y = (x^2 + 3)(x^6 - 1);$$

$$y = \sqrt{x}(2x - 4);$$

$$y = (x^3 + 1) \cdot \sqrt{x};$$

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

$$y = \frac{1}{x}.$$

$$y = \sqrt{x};$$

$$y = -6x + 1;$$

$$y = 12x + \sqrt{x};$$

$$y = -2x^2 - \frac{1}{x};$$