

①

$$\textcircled{a} \quad y = 5x^4 + 5x^2 + 3x - 19$$

$$\frac{dy}{dx} = 20x^3 + 10x + 3$$

$$y = x^n$$
$$\frac{dy}{dx} = nx^{n-1}$$

$$\textcircled{b} \quad y = (2x+5)(x-1)$$

$$y = 2x^3 + 2x + 5x - 5$$

$$y = 2x^3 + 7x - 5$$

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

$$\frac{dy}{dx} = 6x^2 + 3$$

$$\textcircled{c} \quad y = \frac{1}{x^6} - \cos 5x$$

$$y = x^{-6} - \cos 5x$$

$$\frac{dy}{dx} = -6x^{-7} + 5\sin 5x$$