

$$x^3 + \sin y + \cos(2x + 5y) = 1$$

We differentiate both sides of the equation like a composite function by x:

$$3x^2 \sin y + x^3 \cos y y' - \sin(2x + 5y)(2 + 5y') = 0$$

$$3x^2 \sin y + x^3 \cos y y' - 2 \sin(2x + 5y) - 5y' \sin(2x + 5y) = 0$$

$$y'(x^3 \cos y - 5 \sin(2x + 5y)) = 2 \sin(2x + 5y) - x^2 \sin y$$

$$y' = \frac{2 \sin(2x + 5y) - x^2 \sin y}{x^3 \cos y - 5 \sin(2x + 5y)}$$