5. $x^2 - y^2 = 9$ $(\overset{x}{5}, \overset{y}{4})$

① FIND y'

$\frac{d}{dx}(x^2) - \frac{d}{dx}(y^2) = \frac{d}{dx}(9)$

$2x - 2yy' = 0$

$2x = 2yy'$

$\frac{2x}{2y} = \frac{2yy'}{2y}$

$y' = \frac{x}{y}$

② PLUG THE X,Y PART OF OUR POINT IN AND CHANGE y' TO m

$\boxed{m = \frac{5}{4}}$

6. $2x^3 - y^2 = -7$ $(\overset{x}{1}, \overset{y}{3})$

① $\frac{d}{dx}(2x^3) - \frac{d}{dx}(y^2) = \frac{d}{dx}(-7)$

$6x^2 - 2yy' = 0$

$6x^2 = 2yy'$

$\frac{6x^2}{2y} = \frac{2yy'}{2y}$

$\frac{3x^2}{y} = y'$

② $m = \frac{3(1)^2}{3}$

$m = \frac{3}{3} = \boxed{1}$