$$\frac{d}{dx}\left(6x^2 + 7xy - y^2\right) = \frac{d}{dx}(9) \quad \Rightarrow \quad 12x + 7x \cdot y' + 7y \cdot 1 - 2y\,y' = 0$$

$$\Rightarrow \quad 7xy' - 2y\,y' = -12x - 7y \quad \Rightarrow \quad (7x - 2y)\,y' = -12x - 7y$$

$$\Rightarrow \quad y' = \frac{-12x - 7y}{7x - 2y} = \frac{12x + 7y}{2y - 7x}$$