$$x^2 + y^2 = (3x^2 + 4y^2 - x)^2$$

$$\Rightarrow \quad 2x + 2y\, y' = 2(3x^2 + 4y^2 - x)(6x + 8y\, y' - 1).$$

When $x = 0$ and $y = \dfrac{1}{4}$, we have $0 + \dfrac{1}{2}y' = 2(\tfrac{1}{4})(2y' - 1)$

$\Rightarrow \quad y' = 2y' - 1 \quad \Rightarrow \quad y' = 1$, so an equation of the tangent line

is $\quad y - \frac{1}{4} = 1(x - 0) \quad$ or $\quad y = x + \frac{1}{4}$.