3. $e^{7x-y} + y^2 = 2x$

$\frac{d}{dx}\left(e^{7x-y}\right) + \frac{d}{dx}(y^2) = \frac{d}{dx}(2x)$

$e^{7x-y} \cdot \frac{d}{dx}(7x-y) + 2yy' = 2$

$e^{7x-y} \cdot (7 - 1 \cdot y') + 2yy' = 2$

$7e^{7x-y} - y'e^{7x-y} + 2yy' = 2$

$2yy' - y'e^{7x-y} = 2 - 7e^{7x-y}$

$y'(2y - e^{7x-y}) = 2 - 7e^{7x-y}$

$\frac{y'(2y - e^{7x-y})}{2y - e^{7x-y}} = \frac{2 - 7e^{7x-y}}{2y - e^{7x-y}}$

$y' = \frac{2 - 7e^{7x-y}}{2y - e^{7x-y}}$

RECALL

$e^{7x-y} + y^2 = 2x$

$e^{7x-y} = 2x - y^2$

SO NOW PLUG THIS INTO OUR PROBLEM

$y' = \frac{2 - 7(2x - y^2)}{2y - (2x - y^2)}$

$y' = \frac{2 - 14x + 7y^2}{2y - 2x + y^2}$