$$\frac{d}{dx}(e^{x/y}) = \frac{d}{dx}(7x - y) \implies e^{x/y} \cdot \frac{d}{dx}(x/y) = 7 - y'$$

$$\Rightarrow e^{x/y} \cdot \frac{y \cdot 1 - x \cdot y'}{y^2} = 7 - y' \implies e^{x/y} \cdot \frac{1}{y} - \frac{xe^{x/y}}{y^2} \cdot y' = 7 - y'$$

$$\Rightarrow y' - \frac{xe^{x/y}}{y^2} \cdot y' = 7 - \frac{e^{x/y}}{y} \implies y' \left(1 - \frac{xe^{x/y}}{y^2}\right) = \frac{7y - e^{x/y}}{y}$$

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