

$$\begin{aligned} \frac{-10}{(421)} \quad & \begin{cases} y'(x_1) = a \\ x'(y_1) = \frac{6}{2a+3} \end{cases} \quad \left. \vphantom{\begin{matrix} y'(x_1) = a \\ x'(y_1) = \frac{6}{2a+3} \end{matrix}} \right\} 1 = a \cdot \frac{6}{2a+3} \quad \Rightarrow \quad \begin{aligned} 2a+3 &= 6a \\ \boxed{a} &= \frac{3}{4} \end{aligned} \end{aligned}$$