9E The Quotient Rule

1. Given that $y=\frac{x}{2 x+5}$, find $\frac{d y}{d x}$
2. A curve $C$ has equation $y=\frac{\sin x}{e^{2 x}}, \quad 0<x<\pi$.

The curve has a stationary point at $P$. Find the coordinates of $P$, to 3 significant figures.

