

39 For $y = 2x - 3$, $m_2 = 2$ and for $y = \frac{3}{5}x + 1$, $m_1 = \frac{3}{5}$.

$$\tan \theta = \frac{2 - \frac{3}{5}}{1 + 2\left(\frac{3}{5}\right)} = \frac{\frac{7}{5}}{\frac{11}{5}} = \frac{7}{5} \cdot \frac{5}{11} = \frac{7}{11} \Rightarrow \theta = \tan^{-1} \frac{7}{11} \approx 32.5^\circ$$