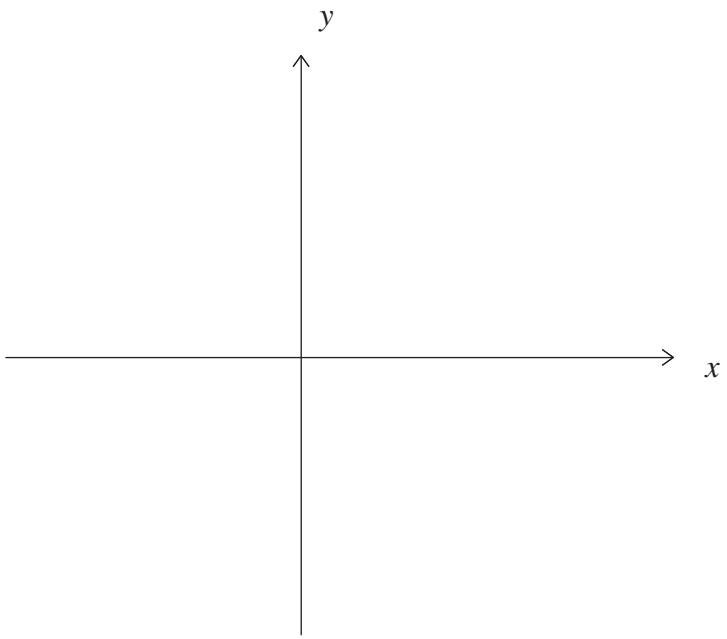
Quiz **Name**

1. Find an equation for the line through the points $(-3, 4)$ and $(5, 2)$. Determine the slope of the line and sketch the line in the space below. Sketch the line through $(-3, 4)$ with slope $-\frac{1}{3}$ on the coordinate plane below. Find the equation of this line.



2. The curve **C** is the graph of the equation $x = y^2 + 2y - 6$. Let $P = (x, y)$ be any point on this curve. In the space below, find an expression of the slope m_P of the tangent line to the curve **C** at the point P (in terms of the coordinates of P). Make use of the limit approach of Leibniz (already demonstrated in class).