1. Consider a line with the given slope which passes through the given point: \( m = 3, \ P(3, -1) \).
   
   (a) Find a point-slope form of the equation of the line.

   (b) Find the slope-intercept form of the equation of the line.

2. Consider a line which passes through the given points: \( P(3, -5), \ Q(7, 4) \).
   
   (a) Find the slope of the line.

   (b) Find the slope-intercept form of the equation of the line.

3. Graph the function: \( f(x) = 2x - 1 \). Find the slope, \( y \)-intercept and \( x \)-intercept.
4. The US Unemployment Rate was 5.0% in January 2008 and 7.7% in January 2009.\textsuperscript{1}

(a) Find a linear function which fits these data using the number of years since January 2008, \(t\), as the independent variable and the unemployment rate, \(U\), as the dependent variable.

(b) Use this model to predict the unemployment rate in January 2010.

\textbf{NOTE:} The actual unemployment rate was 9.7%.

5. Compute the average rate of change of the function over the specified interval:

\[ f(x) = \sqrt{x}, \quad [9, 16] \]

\textsuperscript{1Source: http://www.bls.gov/cps/}