Homework for Precalc

1) Predictions using linear equations:
   - The sales per share for Starbucks Corporation in 2001 were $6.97. In 2002 they were $8.47. Using this information, write a linear equation representing the sales per share for any year.
   - Predict what the sales per share were in 2007.

   (Hint: Let 1 represent 2001)

2) Find the slope of a line that passes through the points (0, 4) & (1, -1).

3) Write the slope-intercept form of the equation of the line that passes through the points
   a. (-3,5) & (7, -11).
   b. (-1,4) & (6,4))
   c. (4,-2) & (4,6)

4) Write the slope intercept form of the equation of a line that passes through (2, -1) and is *parallel* to the equation $2x - 3y = 5$.

5) Write the slope intercept form of the equation of a line that passes through (2, -1) and is *perpendicular* to the equation $2x - 3y = 5$.

6) Write the standard for of the equation of a circle that has a diameter with endpoints (-4, 3) & (7, -1). If you don't remember the standard form of the equation of a circle, look it up on-line!