1. (Section 1.8) Find the $x$ and $y$-intercepts of each of the following. (Do not try to graph the equations.)
   
   a. $x^2 + \frac{y^2}{4} = 1$
   
   b. $y = \frac{x^2 - 9}{x + 2}$

2. Match each of the five lines with the number on the left that best represents its slope.
   
   a. $m = \frac{1}{3}$
   
   b. $m = 0$
   
   c. $m = -1$
   
   d. $m$ is undefined
   
   e. $m = -3$
   
   f. $m = 2.2$
   
   g. $m = 3$

3. A line $L$ passes through the points $(-2, 3)$ and $(4, -5)$. Find the equation of the line $L$
   
   (a) in point-slope form

   (b) in slope-intercept form
4. A line $L$ passes through the point $(-1, 1)$ and is perpendicular to the line $y + 2x = 1$.

(a) Find the equation of line $L$ in slope-intercept form.

(b) Graph both lines on the axes here.

5. Find the equation of the horizontal line that passes through the point $(3, -2)$. What is its slope?

6. Find the equation of the vertical line that passes through the point $(4, -3)$. What about its slope?