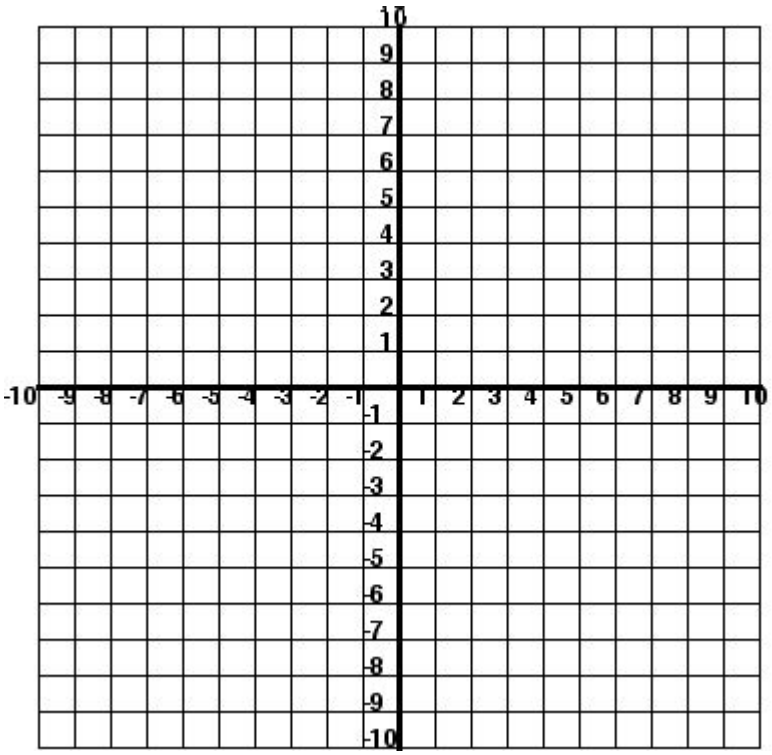
Lesson 2: Are You Ready?

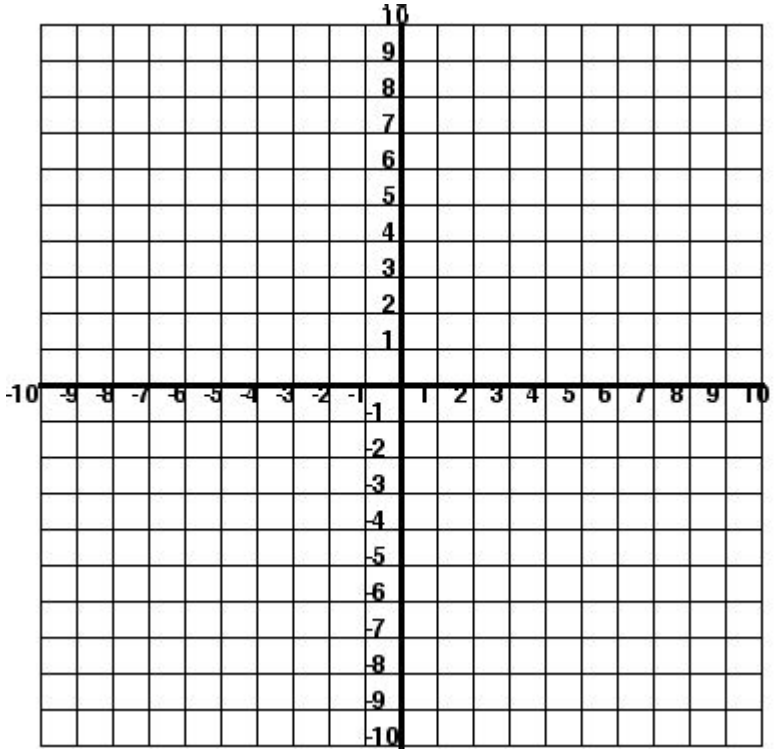
1. In each case, write a linear equation that represents the situation. Choose meaningful letters for the variables.
   a. Kevin makes $10/h working as a produce clerk at the local grocery store. Write an equation relating Kevin's earnings and hours worked.

   b. The cost of renting canoes for a weekend trip is $200 plus $50 per canoe. Write an equation relating the number of canoes and the cost of renting.

2. Solve the following linear systems by graphing.
   a. $x + y = 7$
      $x - y = -3$



b. $x + 2y = 10$
$3x - y = 9$



3. For which linear system(s) is (1, –1) a solution?

A. $2x + 5y = 3$
$x - 3y = 2$

B. $2x - 3y = 5$
$3x + 2y = 1$

C. $x + 2y = -1$
$5x - 5y = 0$

4. A moped is driven at 50 km/h along a 100-km route. The distance D, in kilometres, from the end of the route at time t, in hours, can be modelled by the equation $D = 100 - 50t$.

   a. What does the t-intercept represent?

   b. What does the D-intercept represent?

   c. What does the slope represent?

   d. How much farther does the moped have to travel after 1.5 h?