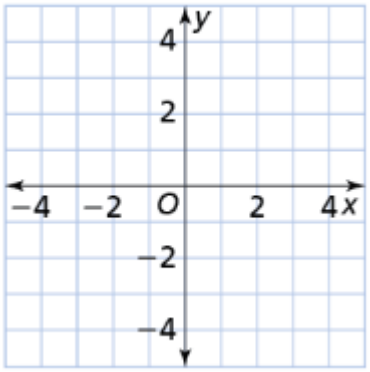
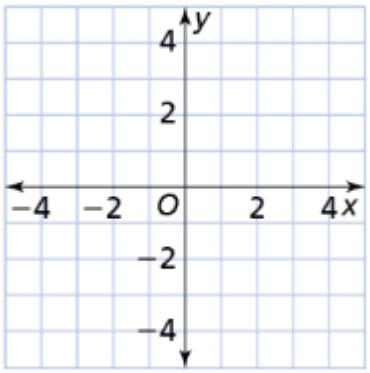
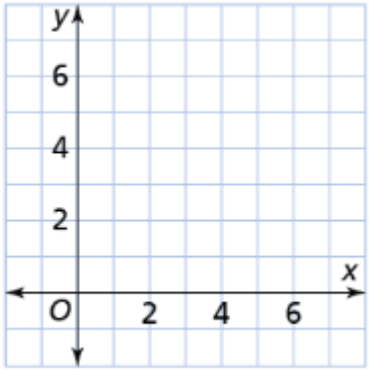
Name: _____ Teacher: _____ School: _____

Grade 8: Lesson 12 Solving Systems by Graphing

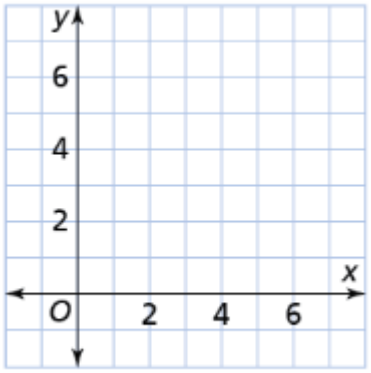
Complete the following exercises. You may use a calculator as needed. A straight edge will be helpful as you draw lines.

Graph each system of equations to determine the solutions. Don't forget to transform each equation into slope-intercept form first.

1. $x + 4y = 8$ $3x + 4y = 0$ Solution: _____	
2. $2x - 3y = 6$ $4x - 6y = 12$ Solution: _____	
3. $x + 2y = 4$ $4x + 8y = 64$ Solution: _____	

4. y = 1.5x +1
   y = -15.x + 5.5

   Solution: _____



5. The total cost, *c*, of renting a canoe for *n* hours can be represented by a system of equations.
   a. Write the system of equations that could be used to find the total cost, *c*, of renting a canoe for *n* hours.

   b. Graph the system of equations

   c. When would the total cost for renting a canoe be the same on both rivers? Explain.

River A	$33
River B	$5/hr plus $13 deposit