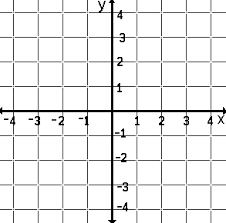
ISTEP REVIEW #1 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Due Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. You can choose between two tennis courts at two university campuses to learn how to play tennis. Campus A charges $25 per hour. Campus B charges $20 per hour plus a one-time registration fee of $10.
   1. Write a system of equations to represent the cost *c* for *h* hours of court use at each campus
   2. Find the number of hours in which the costs are the same.
   3. On Saturday, Sierra decides she will practice tennis for 3 consecutive hours. Which campus should she go to and why?
2. Graph the following system of inequalities:
3. Completely factor the following expressions:
   1. b) 4x2 – 49
4. What is the value of the expression for the given values of each variable?
   1. for and
   2. for and
5. A rectangle with an area of 165cm2 has a width that is 4 centimeters less than its length.

a. Write an equation representing the area of the rectangle. Use *x* to represent the length of the rectangle.

b. Solve your equation for all values of *x*.

c. Use your solution to the equation to identify the length and width of the rectangle. Explain how you determined which value(s) of *x* to use.

