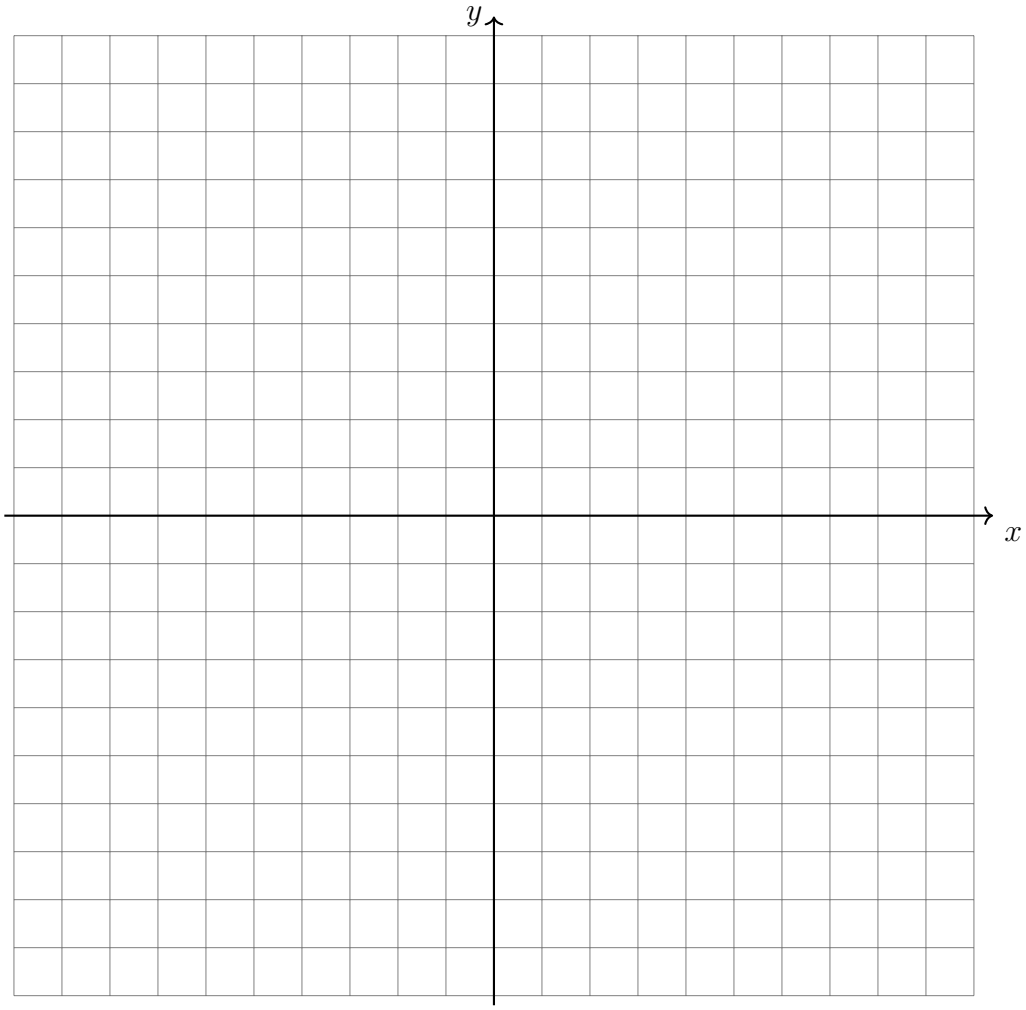
BECA / Dr. Huson / Regents Prep: Graphs First and last name:
22 November 2024 Section:

1.11 Do Now: Graphing inequalities

1. Graph and label the two equations. Mark their intersection as an ordered pair.

   $y > \frac{1}{2}x + 4$ $3x + y \leq -3$



   For each equation, lightly shade the side of the line that satisfies the inequality. Use a solid line for equalities and a dashed line for strict inequalities.

2. In the following problems, solve for the value of x, then check your answer.

   (a) $2x + 5 = x + 9$

   (b) $\frac{4}{5}x = 8$

   (c) $5x - 4 = x + 8$

   (d) $\frac{1}{2}(x - 4) = 3$

   (e) $\frac{1}{3}x - 4 = -2$

   (f) $\frac{2}{3}(x + 4) = x - 2$

3. Factor each equation and solve for the values of x.

   (a) $x^2 - 5x + 4 = 0$

   (b) $x^2 + 7x + 10 = 0$