Name: _____ Class: _____ Date: _____ ID: A

Lesson #4-Solving Systems of Inequalities on the IPad

Problem

1. **For each of the following systems of inequalities, solve the system by using your DEMOS IPAD APP and sketch the graphs and solution regions shown on the IPAD on the graphing sheet. For each of the systems plug everything into your APP and find the solution region. For each graph make sure you find and write down each crticial point from the graph. (SHOW ALL OF YOUR WORK.)**

   1. $2x + 3y < 6$
      $-x + y < 5$
      $y \geq -1$

2. $4x + 5y \geq 20$
   $4x - 2y \leq 10$
   $y \leq 3$

3. $-12x + 4y \leq 4$
   $-3x + 6y \geq 18$
   $y < 7$

4. $-6x + 2y \leq -4$
   $-3x - 9y > -27$
   $-3x + 4y \geq -20$

5. $-4x + 2y < 2$
   $4x + 8y > 24$
   $6x + 3y \leq 33$

6. $-8x - 12y < -24$
   $-5x + 5y \leq 5$
   $x \leq 3$

7. $-12x + 6y < 6$
   $8x + 16y > 48$
   $6x + 2y < 36$

8. $9x + 3y \leq 2,160$

   $15x + 10y \leq 9,000$

   $x \geq 0$

   $y \geq 0$

9. $15x + 5y \leq 1800$

   $30x + 20y \leq 6000$

   $x \geq 0$

   $y \geq 0$

10. $4x + 4y \leq 400$

    $3x + 6y \leq 600$

    $x \geq 20$

    $y \geq 10$