

# MA162: Finite mathematics

Paul Koester

University of Kentucky

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## SCHEDULE:

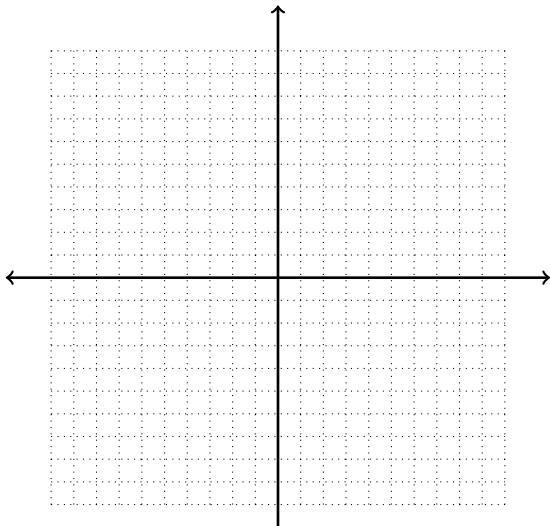
- Web Assign assignment (Chapter 3.1) due on Tuesday, October 8 by 6:00 pm.
- Web Assign assignment (Chapter 3.2) due on Tuesday, October 11 by 6:00 pm.

Today we cover Chapter 3.1: Linear Inequalities in two variables.

# Graphing a single inequality

Graph the solution to the inequality

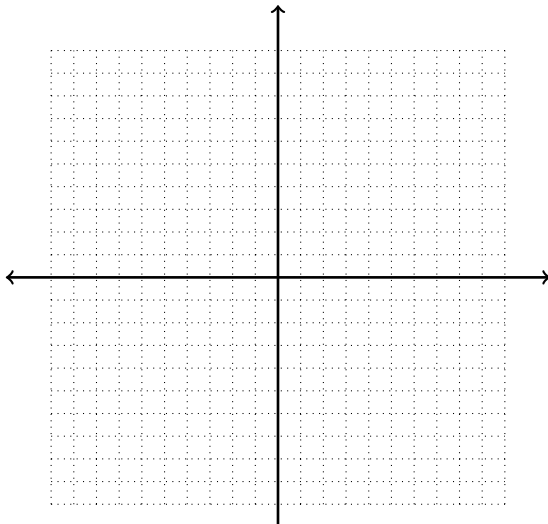
$$3x \leq 4$$



# Graphing single inequality some more

Graph the solution to the inequality

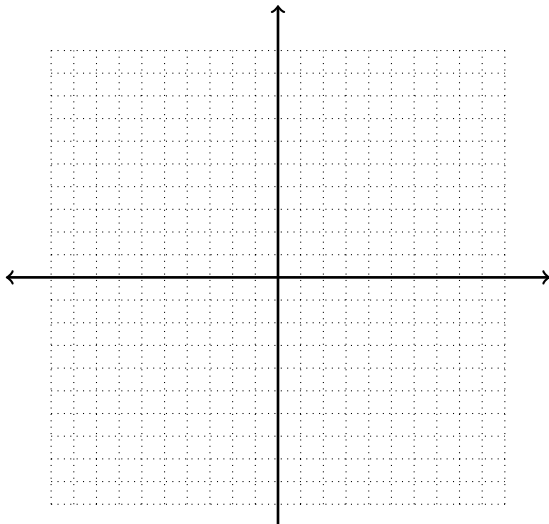
$$2x + 3y < 4$$



# The return of the son of graphing a single inequality

Graph the solution to the inequality

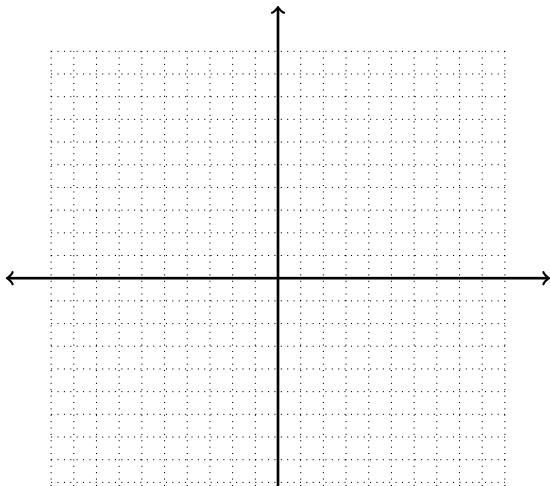
$$5x - 2y > 3$$



# Graphing a system of inequalities

Graph the solution to the system of inequalities

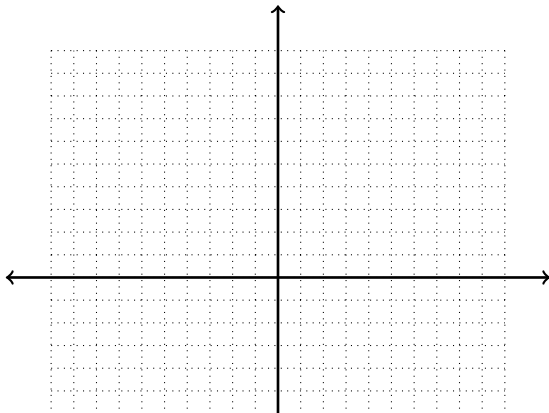
$$\begin{aligned} 3x &\leq 4 \\ 2x + 3y &< 4 \end{aligned}$$



# Graphing a system of inequalities

Graph the solution to the system of inequalities

$$\begin{array}{rclcl} x & + & 2y & \geq & 3 \\ 5x & - & 4y & \leq & 16 \\ 0 & \leq & y & \leq & 2 \\ & & x & \geq & 0 \end{array}$$



# Find the inequalities

Find the system of inequalities which describe the given region:

