

<u>1st</u>	8:30- 9:20
<u>2nd</u> <u>(Elective class)</u>	9:23- 10:13
<u>3rd</u>	10:16-11:03
<u>LUNCH</u>	<p>11:05-11:30</p> <p>Students will eat at regular 3rd period lunch table; Ms. Elliott's 3rd period week to clean so those students will be delayed to 4th period - but 7th grade will be in lunch by 11:34 so these students won't be that late.</p>
<u>4th</u>	11:35- 12:25 †
<u>HR</u>	<p>12:30 for busses and dismissal</p> <p>Students take backpacks with them - they will NOT be allowed back on the 8th grade hallway when we return to school.</p>



Welcome to Math

What are the solutions to the equation $4x^2 - 52x + 169 = 121$?

- A {1, -12}
- B {-1, 12}
- C {-1, -12}
- D {1, 12}

Karen has two dogs. The larger dog weighs 1.4 pounds more than the smaller dog. The combined weight of the two dogs is 12.6 pounds. What is the weight, in pounds, of the smaller dog?

Assignments:

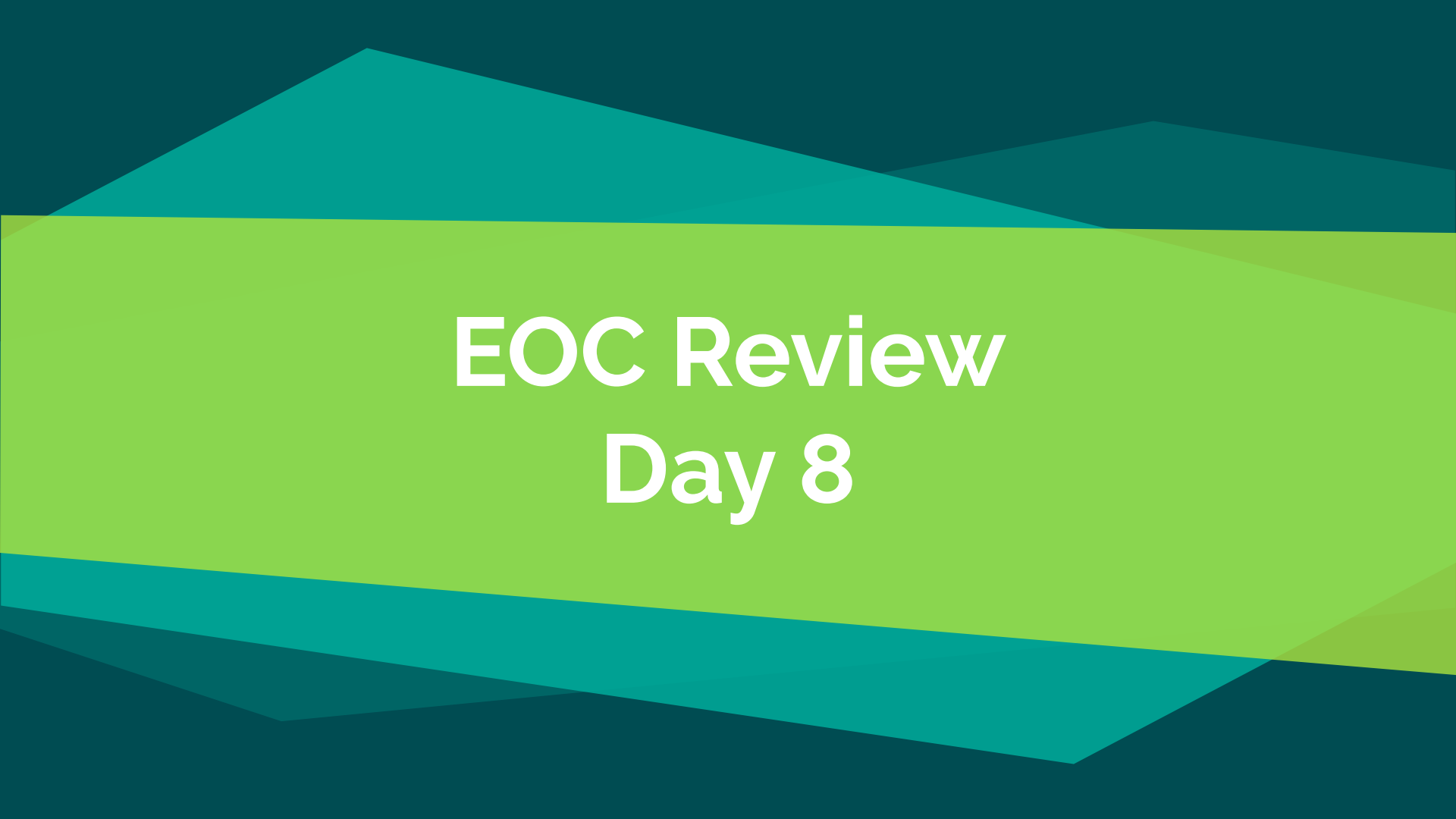
- ◆ Geometry test corrections due Friday
- ◆ Math One-Pagers are due on Monday
 - ◆ Four required for everyone for a formal grade
 - ◆ Seven will exempt your lowest FBF
 - ◆ Ten will replace your lowest FBF with a 10/10
- ◆ Last FBF is on Friday
- ◆ EOC on May 30th

Announcements

- ◆ All grades are up to date - if you think there is an error, talk to me or send me an email!
- ◆ May 20th - Chromebooks stay at school
- ◆ May 22nd - NO HOMEWORK
- ◆ Textbooks due Friday, May 24
- ◆ Hidden Figures books due Friday, May 24
- ◆ Calculator collection on Friday, May 24
- ◆ *Anything forgotten on Friday, May 24th can be turned in on Tuesday, May 28th*

Your final formal / extra credit opportunity

Math One- Pagers!

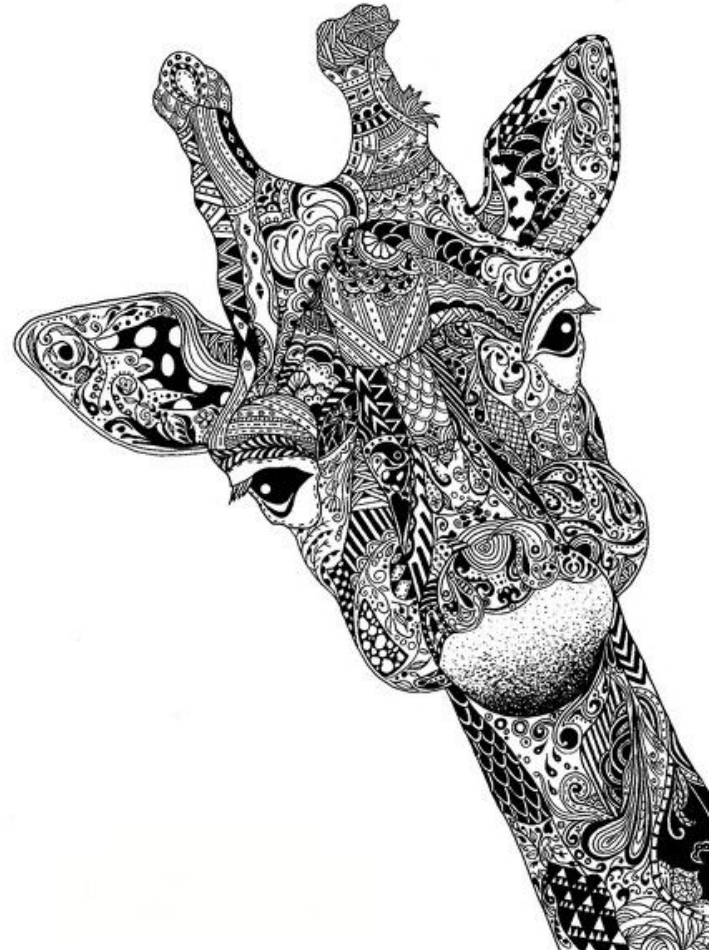
The slide features a dark teal background with several overlapping, semi-transparent geometric shapes in shades of teal and light green. A prominent light green horizontal band is centered on the slide, containing the text.

EOC Review

Day 8

Unit 8-9 Review

5/15/2019



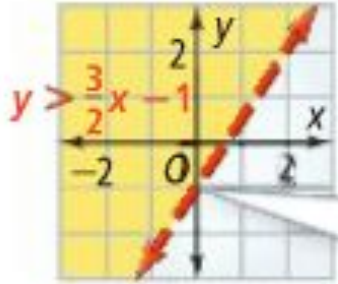
Unit 8

Systems of Linear Inequalities

Linear Inequalities

- Linear Inequality: An inequality in two variables whose graph is a region of the coordinate plane that is bounded by a line. Each point in the region is a solution of the inequality
- A linear inequality in two variables has an infinite number of solutions. These solutions can be represented in the coordinate plane as the set of all points on one side of a boundary line.
- All points on one side of the boundary line are solutions, while the other side are not solutions

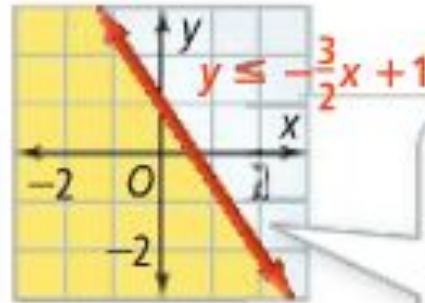
Dashed vs. Solid Lines & Shading



Each point on a *dashed* line is not a solution. A dashed line is used for inequalities with $>$ or $<$.

Shade below because of the $>$

Shade above because of the $>$



Each point on a *solid* line is a solution. A solid line is used for inequalities with \geq or \leq .

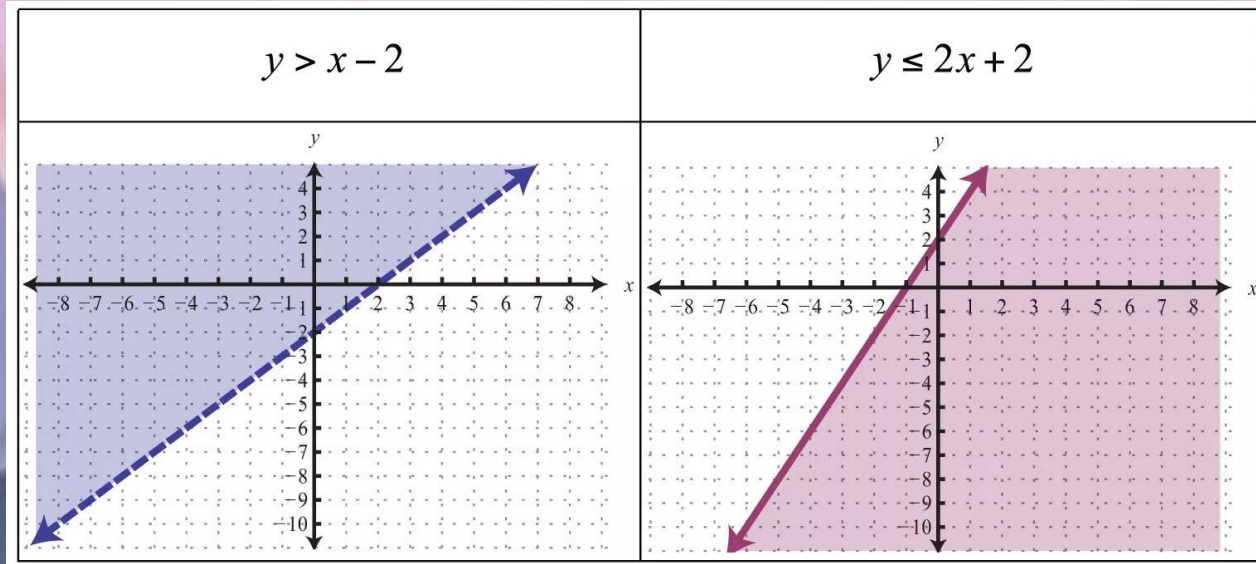
Rules:

Graph the inequality like a normal equation BUT

- Use a dotted line for $<$ and $>$
- Use a solid line for \leq and \geq

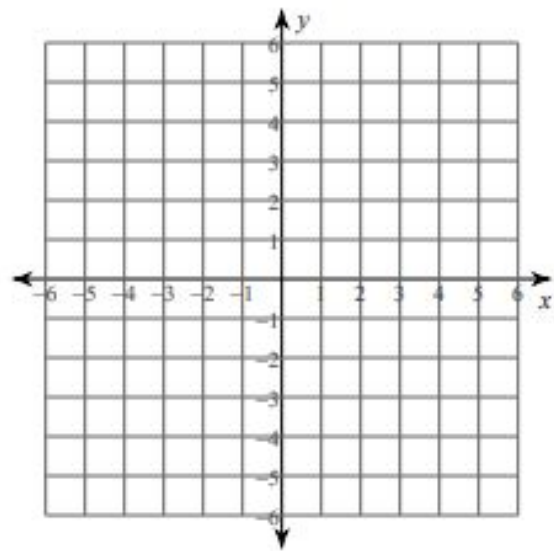
Shade the inequality

- Shade above for \geq and $>$
- Shade below for \leq and $<$

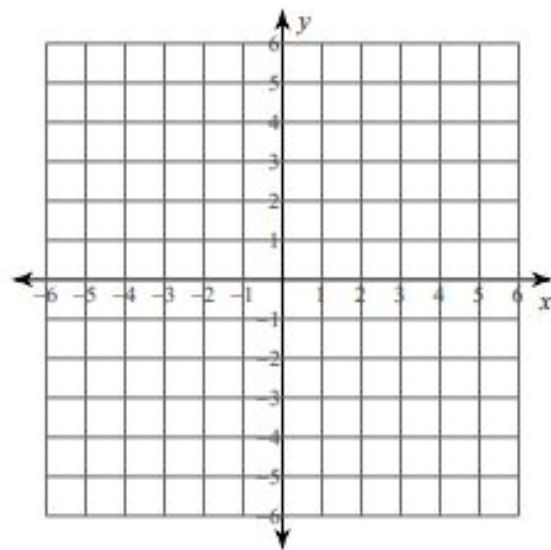


Sketch the graph of each linear inequality.

1) $y \geq -3x + 4$



2) $y \leq \frac{3}{5}x - 5$



The solution to a system of inequalities is the overlapping shaded regions

To find the overlapping shaded region:

1. Solve both equations for y
2. Find x and y intercepts, and graph using those
3. Show dotted and solid lines
4. Shade each inequality in the proper direction
5. Shade the overlapping region (the solution set) darker!

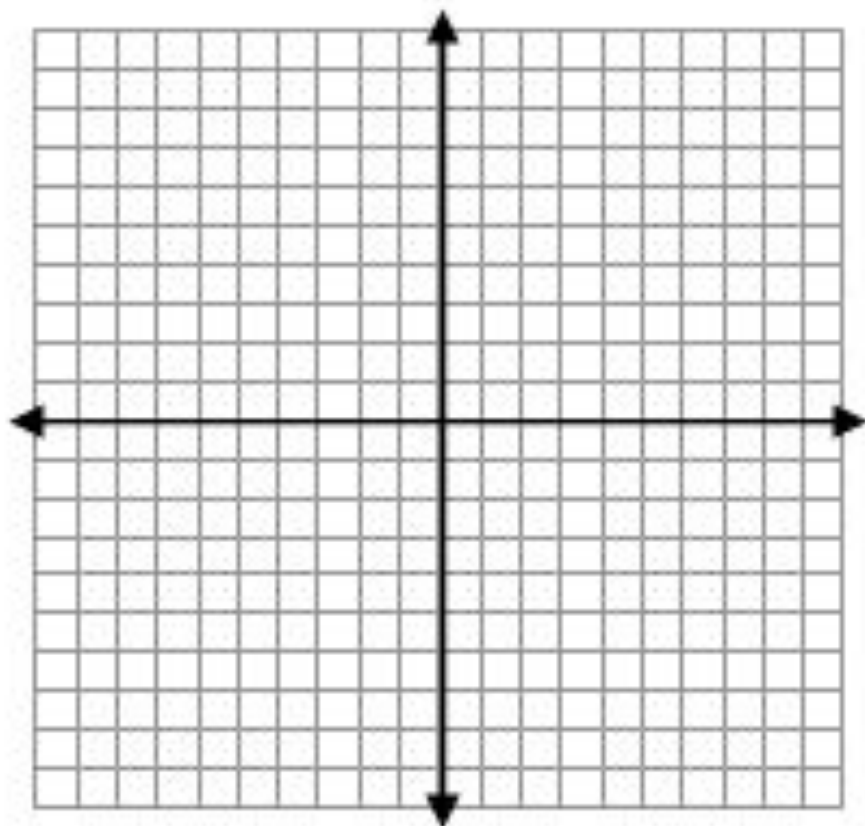
When you have graphed your system of inequalities, you have two possible outcomes:

1. Intersecting regions: overlapping shaded region is the solution
2. Separate regions: No solution exists

Example 1:

$$x \geq 2$$

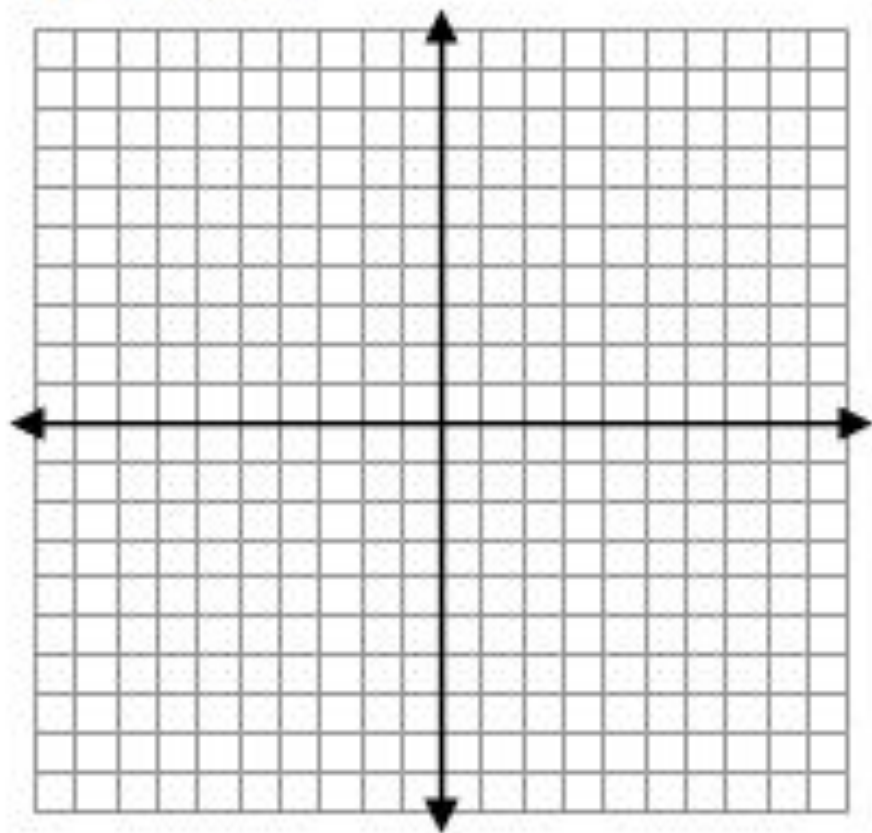
$$y > 3$$



Example 2:

$$y < 2 - x$$

$$y > x + 4$$



Unit 9

Word Problems (mixture, age, and travel)

Notes on Mixture Problems

The moment you see a mixture problem, get excited because we solve them all the same way! Use this chart:

You mix this thing 1	Amount of thing 1	<i>Sometimes there is other information about thing 1</i>	Multiply across
With this thing 2	Amount of thing 2	<i>Sometimes there is other information about thing 2</i>	Multiply across
To make this thing 3	Amount of thing 3	<i>Sometimes there is other information about thing 3</i>	Multiply across

Example 1

Delectable Dan's Cookie Company sells two kinds of cookies daily: chocolate chip at \$6.50 per dozen and white chocolate macadamia at \$9.00 per dozen. On Thursday, Dan sold 85 dozen more chocolate chip than white chocolate macadamia cookies. The total sales for both were \$4055.50. How many dozen of each were sold?

Example 2

Susan wants to mix 10 pounds of Virginia Peanuts that cost \$3.50 a pound with Spanish Peanuts that cost \$3 a pound to obtain a mixture that costs \$3.40 a pound. How many pounds of Spanish Peanuts should she use?

Example 3

Charles is doing an experiment that calls for 40% solution of copper sulfate. He has 60 mL of a 25% solution. How many mL of a 70% solution should Charles add to obtain the required 40% solution?

Age Problem:

Carol is 15 years older than her cousin Amanda.

Cousin Bill is 4 times as old as Amanda. The sum of their ages is 99. Find Each of their ages

Two airplanes leave Dallas at the same time and fly in opposite directions. One airplane travels 80 miles per hour faster than the other. After three hours, they are 2940 miles apart. What is the rate of each airplane?

A train leaves a train station at 1 p.m. It travels at an average rate of 60 mi/h. A high-speed train leaves the same station an hour later. It travels at an average rate of 96 mi/h. The second train follows the same route as the first train on a track parallel to the first. In how many hours will the second train catch up with the first train?