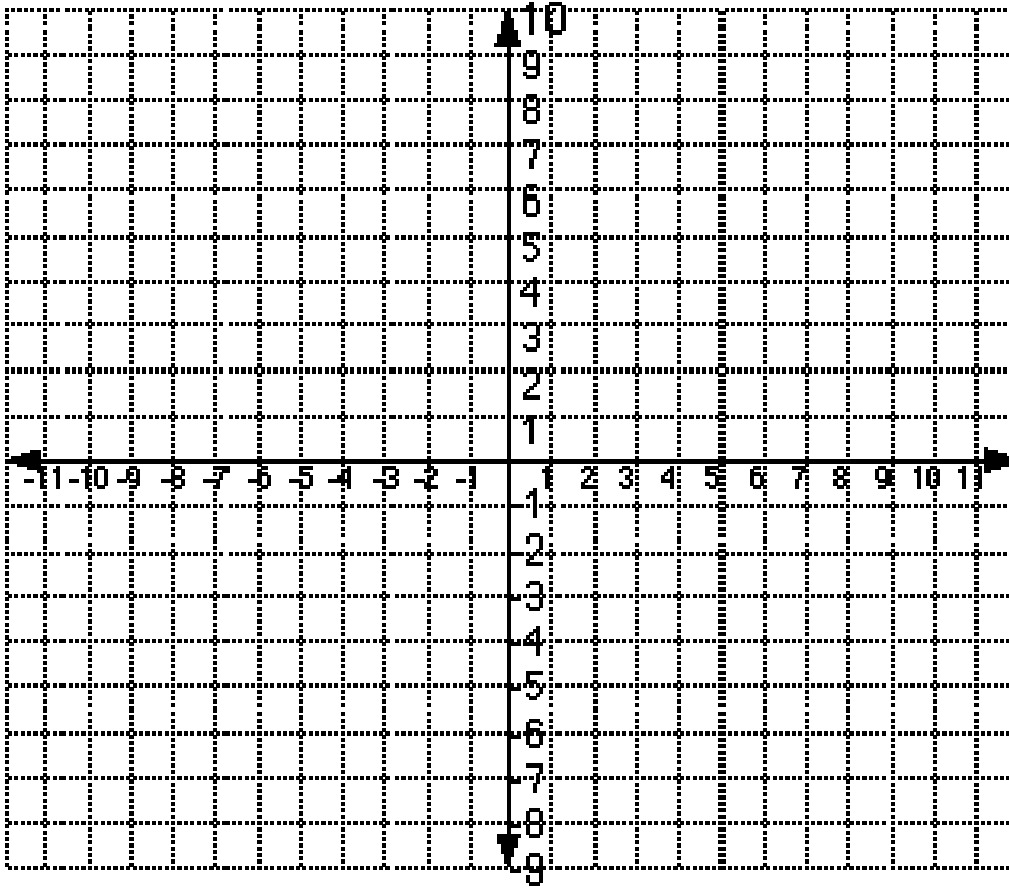


### Review

Use the x and y intercepts for the following two equations to draw their graphs on the grid below.

$$3x - y - 5 = 0 \text{ and } 2x + 3y = 6$$



### U2L4 – 1.5 The Ways that Two Lines can Intersect

Students will use the method of comparison to determine the way in which two lines can intersect.

---

## Examples

1. a) Rewrite  $2x + 3y = 6$  in the form  $y = mx + b$ .

b) Compare the slope and y-int of the equation in part a to  $y = 3x - 5$

c) How do these two lines intersect (look at your graph in the review)?

2. Without graphing (ie. write the equations in the form  $y = mx + b$ ), determine the number of solutions to the linear system below:

$$3x + 4y = 12$$

$$36 - 12y = 9x$$

3. Lisa plans to make her prom dress. She can spend \$100 for material. The design requires a combination of two different fabrics, totaling 25m.
- a) Two fabrics that Lisa likes, silk and satin, both cost \$10/m. What combination of silk and satin should she buy?

- b) Lisa also likes two other materials, blue cotton and gingham, that both cost \$4/m. What combination of blue cotton and gingham should she buy?