

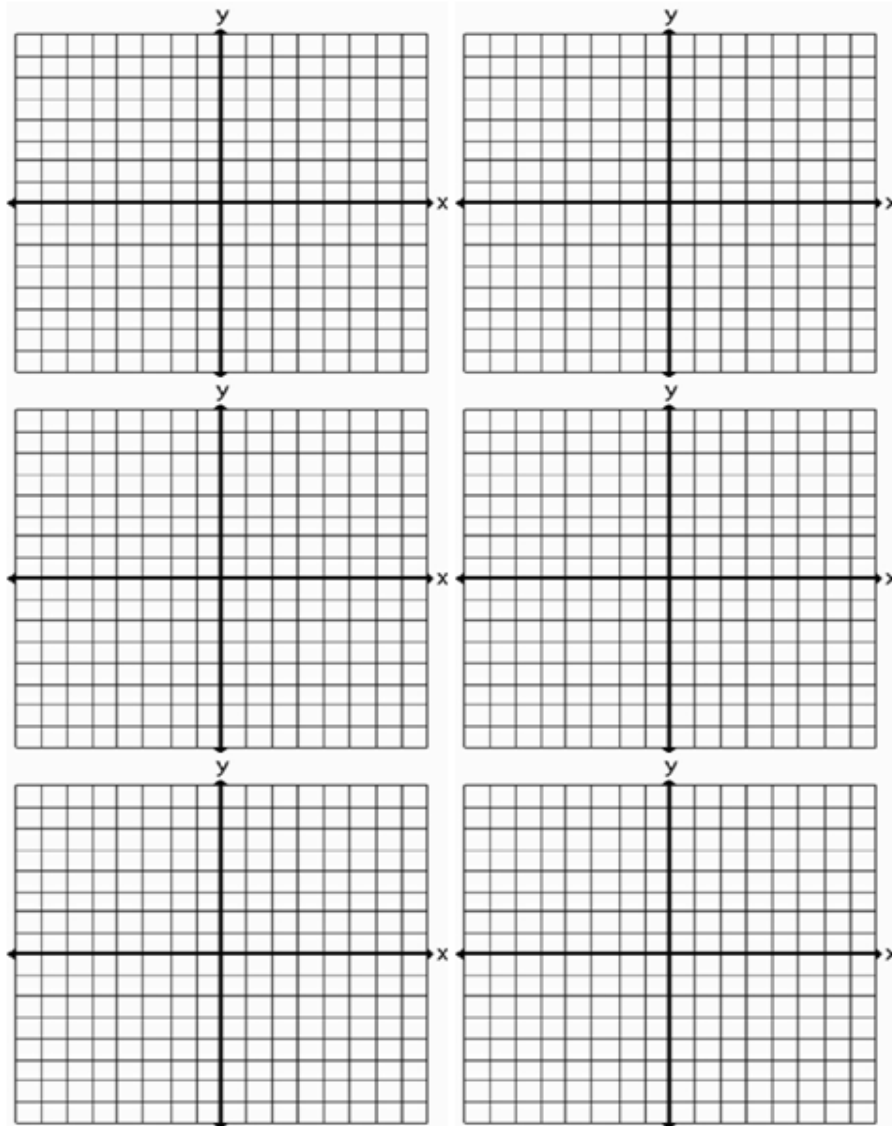
Module 5 Lesson 2 Math Lab: Investigating Intercepts

You will analyze the graphs of linear relations. A point on the axis where the graph intersects is called an intercept.

Sketch the lines from the following descriptions onto the graphs provided.

- Line A: a line with two distinct intercepts
- Line B: a line with two distinct intercepts but with a different slope than Line A
- Line C: a line with only one intercept that does not pass through the origin
- Line D: a line with only one intercept that does not pass through the origin but with a different slope than Line C
- Line E: a line with more than two intercepts (This one is more challenging, but is still possible.)

1. Sketch one line per grid. Label each line according to the letter in each description. Remember that each line is straight—no curves are permitted.



2. Complete the following table by identifying the domain, range, and slope of each of the lines that you sketched in the previous step.

Line	Domain	Range	Slope
A			
B			
C			
D			
E			

Analysis

3. a. What kinds of lines have exactly two intercepts?
- b. How would you describe their slopes?
- c. What is the domain and range of these lines?
4. a. What kinds of lines have only one intercept?
- b. How would you describe their slopes?
- c. How is the domain and range of these lines different from lines with two intercepts?
5. Describe lines that have an infinite number of intercepts.