

Unit 1: Systems of Linear Equations

Day 7: How Lines Intersect

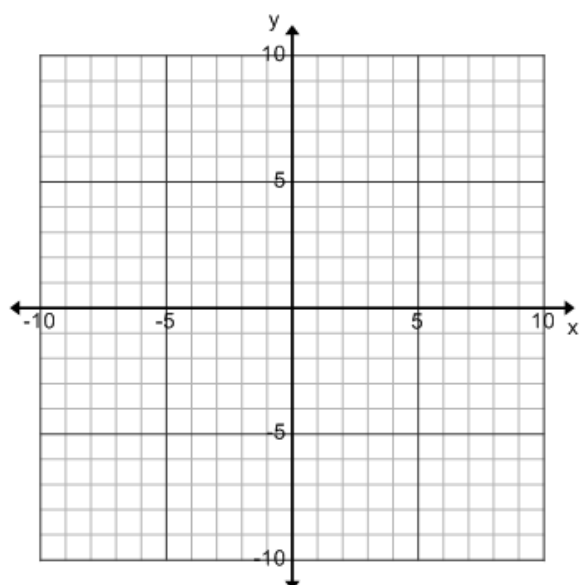
Today we will.....

- examine how slope and y-intercept determine the number of solutions to a linear system

Solve the following by graphing:

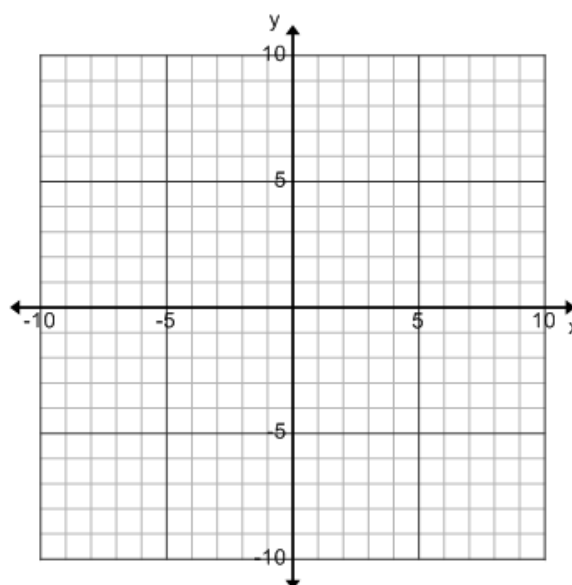
a) $y = 2x + 1$

$$y = -x + 7$$



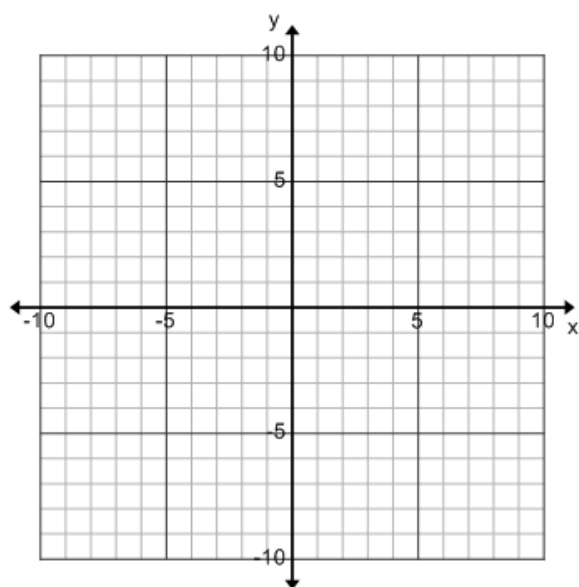
b) $-3y = 9 - 6x$

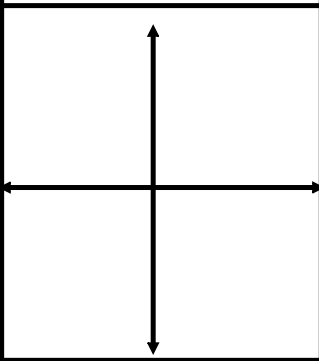
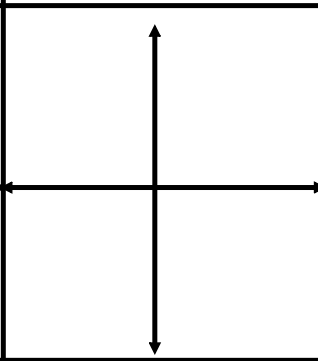
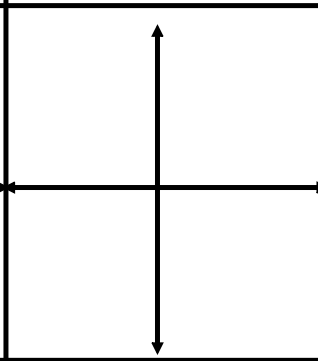
$$4x - 10 = 2y$$



$$c) \quad 4x - 2y = 6$$

$$6x = 9 + 3y$$



	A	B	C
Linear System	$y = 2x + 1$ $y = -x + 7$	$-3y = 9 - 6x$ $4x - 10 = 2y$	$4x - 2y = 6$ $6x = 9 + 3y$
System in $y = mx + b$ form			
Slopes (same or different?)			
y-Intercepts (same or different?)			
Sketch - a sketch gives the general shape of a graph - it does not need to be exact - it should be a good representation of the behaviour			
Number of Solutions			

Homework:
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