

Linear Equations and Graphs (Part 1): Intercepts and Slope

First & Last Name: _____ Class: _____

If you did not get full points on the *Linear Equations and Graphs* section of the “Pre-Review” test, attempt all of the (non-challenge) questions on this handout. Check your answers using the answer key. If you did not get a correct answer, use Khan Academy to review and master the topic.

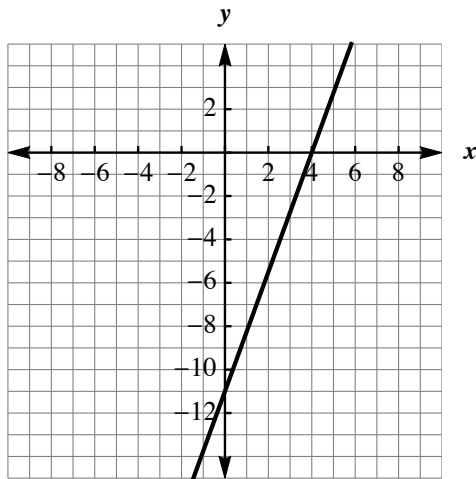
Honor Students: you are expected to master the challenge questions.

Section 1: Solutions to 2-variable equations (KA link)

- Which ordered pair is a solution to the equation $y = 5x + 11$?
 - $(-1, 6)$
 - $(2, 21)$
 - Both $(-1, 6)$ and $(2, 21)$
 - Neither.
- [Challenge] Which ordered pair is a solution to the equation $-2x + 2y = 6x - 2y$?
 - $(1, 2)$
 - $(-1, 2)$
 - Both $(1, 2)$ and $(-1, 2)$
 - Neither.

Section 2: Intercepts from a graph (KA link)

- Determine the intercepts of the line.
 x-intercept: (____, ____) y-intercept: (____, ____)

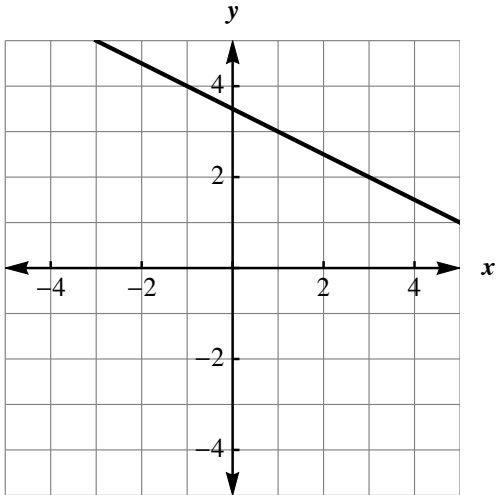


Section 3: Intercepts from an equation (KA link)

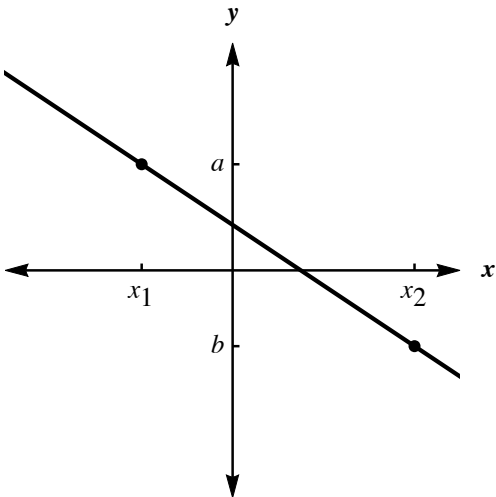
- Determine the intercepts of the line $-6x + 7y = 14$.
 x-intercept: (____, ____) y-intercept: (____, ____)
- [Challenge] Determine the intercepts of the line $-ax + by = 14$.
 x-intercept: (____, ____) y-intercept: (____, ____)

Section 4: Slope from graph (KA link)

1. What is the slope of the line? $m =$ _____



2. [Challenge] What is the slope of the line? $m =$ _____



Section 5: Slope from two points (KA link)

1. What is the slope of the line through $(-2, -3)$ and $(7, 13)$? $m =$ _____

2. [Challenge] What is the slope of the line through $(-2, \pi)$ and $(\pi, 2)$? $m =$ _____

Section 6: Horizontal and vertical lines (KA link)

1. What is the equation of the horizontal line through $(-2, -3)$?

2. What is the slope of the line $y = 5$?

3. [Challenge] What is the slope of the line $x = -5$?