

Linear Equations and Graphs (Part 2): Equation Forms

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.

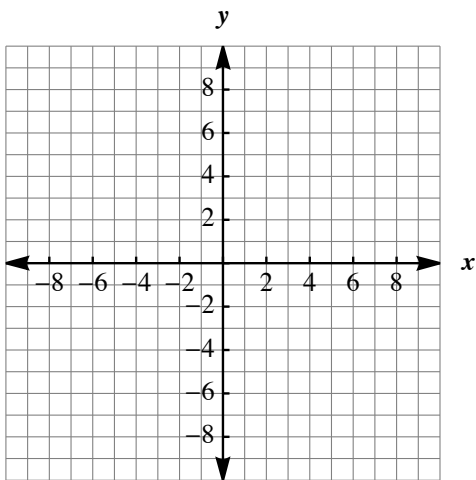
Honor Students: you are expected to master the challenge questions.

Section 1: Slope-intercept intro (KA link)

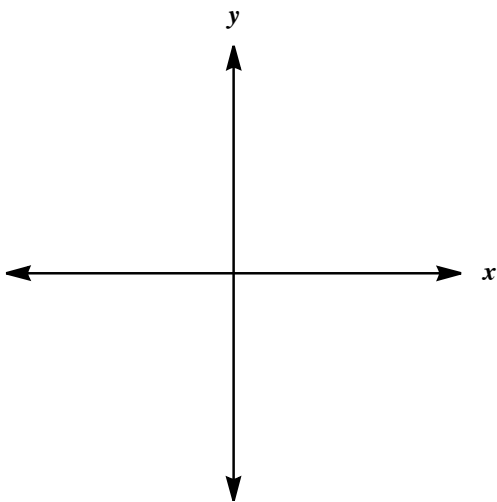
1. What is the y-intercept of $y = -6x + 4$? y-intercept: (____, ____)
2. Write the equation of the line whose slope is -4 and the y-intercept is $(0, -5)$.

Section 2: Graph from slope-intercept form (KA link)

1. Graph $y = \frac{3}{5}x - 7$

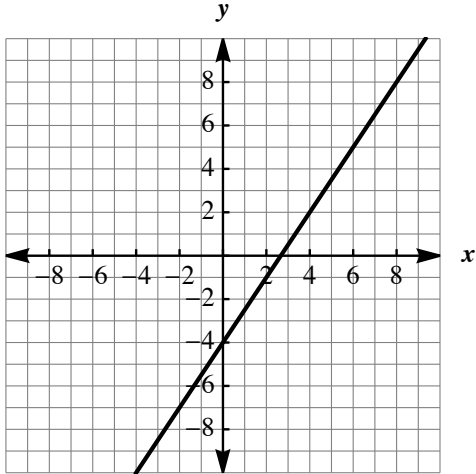


2. [Challenge] Graph $y = mx + b$ where $m < 0$ and $b > 0$.



Section 3: Slope-intercept equation from graph (KA link)

1. Find the equation of the line in slope-intercept form. Use exact numbers.



Section 4: Slope-intercept from two points (KA video link)

1. Find the equation of the line with slope $-1/3$ through $(-3, 6)$ in slope-intercept form.
2. [Challenge] Find the equation of the line with slope m through (x_1, y_1) in slope-intercept form.

Section 5: Slope-intercept from two points (KA link)

1. Find the equation of the line through $(-10, -4)$ and $(-3, 5)$ in slope-intercept form.
2. [Challenge] Find the equation of the line through $(-1/3, -1/2)$ and $(3/4, 4)$ in slope-intercept form.

Section 6: Point-slope form (KA link)

1. Find the equation of the line through $(10, -4)$ and $(-3, -5)$ in point-slope form.
2. [Challenge] Find the equation of the line through $(1/3, -1/2)$ and $(-3/4, 4/3)$ in point-slope form.