

Slope-Intercept Screen

Explore the parameters of the slope-intercept form of a line.

Simplified equation of line

DRAG the blue point to change the slope

DRAG the pink point to change the y-intercept

Use the point tool to get the integer coordinates of any point

MANIPULATE the slope and/or y-intercept from the equation

SAVE a line to compare multiple lines simultaneously

SHOW reference lines of $y=x$ or $y=-x$

Graphing Slope-Intercept

Game Screen

Challenges are random within each level, but increase in difficulty.

LEVELS 1-1: Set the Slope or Set the Y-Intercept by manipulating either the equation or the graph

LEVELS 3-4: Make the Equation, Graph the Line, or Put Points on Line

Choose Your Level

Level 1

Level 2

Level 3

Level 4

Your Equation: $y = \frac{1}{1}x - 3$

Your Equation: $y = \frac{2}{3}x + 0$

Your Equation: $y = \frac{1}{1}x + 0$

Graphing Slope-Intercept

Complex Controls

- If two points are stacked vertically on any screen, the slope will be displayed as undefined and a red x will appear over the equation.

See all activities for Graphing Slope-Intercept [here](#).

For more tips on using PhET sims with your students, see [Tips for Using PhET](#).

