UCM07BLM/AK_61378 1/30/03 12:23 PM Page 13

NAME

Module 7 Solving Linear Equations and Inequalities of Two Variables

Lesson 2 Graphing Linear Equations of Two Variables

guided notes

Lesson Objectives

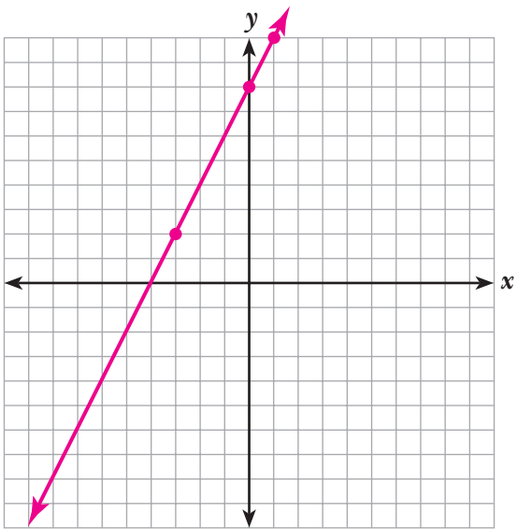
- Graph linear equations from a data table.
- Graph linear equations using the intercept method.
- Graph linear equations using the slope-intercept method.

It is important to remember that any point on the graph of an equation is **a solution to the equation**.

1 Graph the equation using a table.

$4x - 2y = -16$

x	y
–3	**2**
0	**8**
1	**10**



The **x-intercept** is the x-coordinate of the point at which the graph crosses the x-axis.

The **y-intercept** is the y-coordinate of the point at which the graph crosses the y-axis.

© 2003 BestQuest

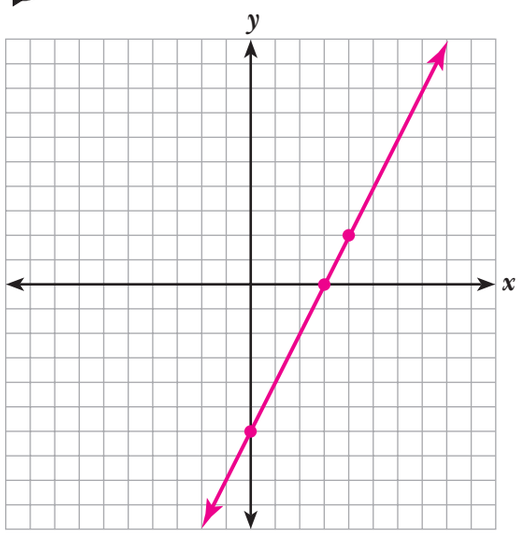
monotype composition 410-467-3300

UCM07BLM/AK_61378 1/30/03 12:23 PM Page 14

To find the *x*-intercept of any equation, set *y* equal to zero and solve for ___x___.

To find the *y*-intercept of any equation, set *x* equal to zero and solve for ___y___.

2 Graph $2x = y + 6$ using the intercept method.



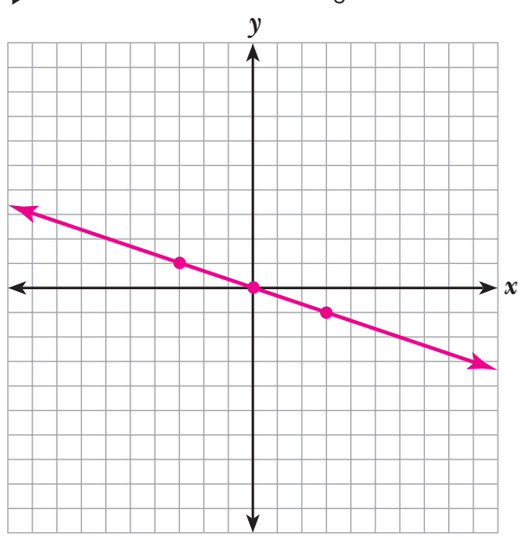
The slope of a line is the ratio ___rise___ to ___run___.

slope $= \frac{\text{rise}}{\text{run}}$

Slope-intercept form of a linear equation: ___$y = mx + b$___

$m =$ ___slope___ $b =$ ___y-intercept___

3 Graph the equation $y = \frac{-x}{3}$ using the slope-intercept method.



© 2003 BestQuest

monotype composition 410-467-3300