

LESSON
6-3

Comparing Functions

Reteach

Functions can be represented in many forms. You can identify the slope and y-intercept from any format.

Representation	Slope	y-intercept
Equation written in slope-intercept form: $y = mx + b$	Value of m	Value of b
Table of values	Substitute any two ordered pairs into the slope formula. $m = \frac{y_2 - y_1}{x_2 - x_1}$	Substitute the slope and one ordered pair (x, y) into the slope-intercept formula. $y = mx + b$ Solve for b .
Graph	Choose two points on the line. Find the ratio of vertical change to horizontal change.	Find the point where the line crosses the y-axis. You may need to extend the graph.

Find the slopes and y-intercepts of the linear functions f and g . Then compare the graphs of the two functions.

1. $f(x) = -\frac{1}{2}x - 2$

x	-2	0	2	4	6
g(x)	4	1	-2	-5	-8

slope of $f =$ _____

slope of $g =$ _____

y-intercept of $f:$ _____

y-intercept of $g:$ _____

2. $f(x) = 6x - 1$

slope: of $f =$ _____ of $g =$ _____

y-intercept: of $f =$ _____ of $g =$ _____

