

Name _____

Date _____

Manipulating the Graphs of Functions - Guided Lesson

Complete the following problems:

1) Which statement best describes the effect on the graph of $f(x) = 9x - 2$.

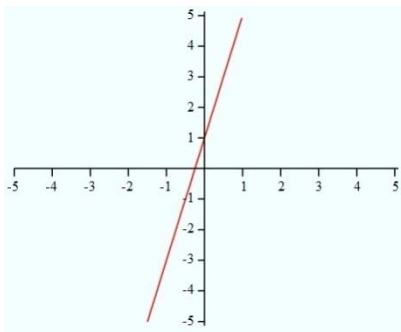
If the y intercept is changed to + 8?

- a. The slope does not change.
- b. The new line passes through the origin.

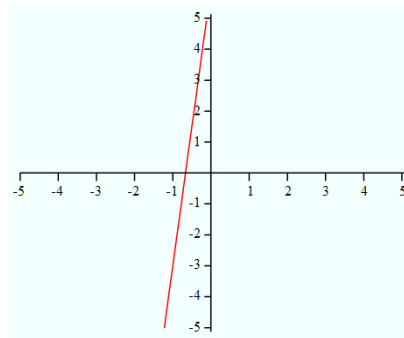
2) The graph of a line that contains the points $(-5, -9)$ and $(3, 7)$ is shown below.

Which best represents this line if the slope is doubled and the y-intercept remains constant?

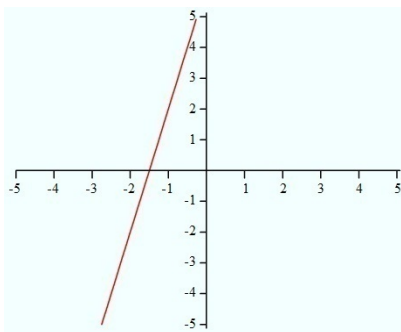
a.



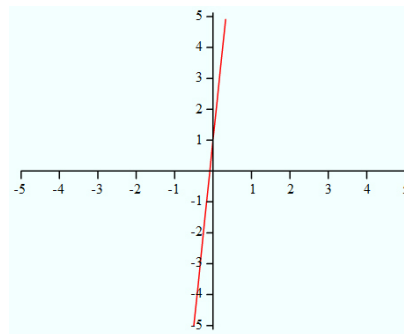
b.



c.



d.



3) The function $y = 3x + 4$, which statement best describes the effect of increasing the y-intercept by 4?

- a. The new line is parallel to the original.
- b. The new line has greater rate of change.

