

Name _____

Date _____

Manipulating the Graphs of Functions - Independent Practice Worksheet

Complete all the problems.

1. The function $y = 11x - 8$, which statement best describes the effect of increasing the y-intercept by 7?

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

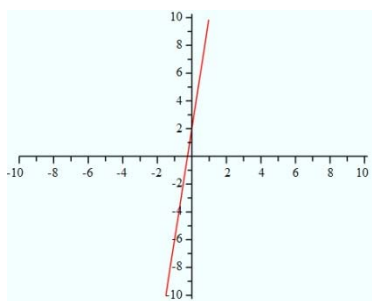
2. Which statement best describes the effect on the graph of $f(x) = 6x - 5$ if the y intercept is changed to + 12?

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

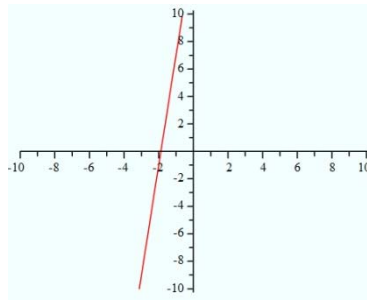
3. The graph of a line that contains the points $(-7, -5)$ and $(2, 4)$ is shown below.

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

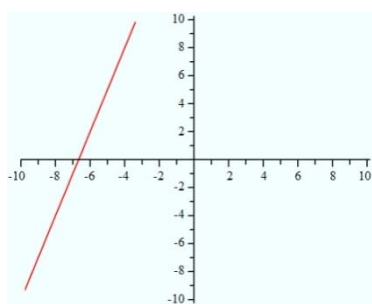
a)



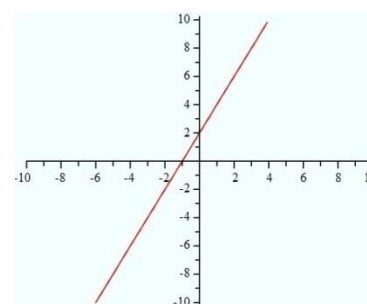
b)



c)



d)



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4. The function $y = 3x - 5$, which statement best describes the effect of increasing the y-intercept by 7?

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

5. Which statement best describes the effect on the graph of $f(x) = 8x - 3$

If the y intercept is changed to + 5?

- a. The slope remains constant.
- b. The new line passes through the origin.

6. The function $y = 4x - 6$, which statement best describes the effect of increasing the y-intercept by 7?

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

7. Which statement best describes the effect on the graph of $f(x) = 14x - 4$

If the y intercept is changed to + 6?

- a. The slope stays the same.
- b. The new line passes through the origin.

8. Which statement best describes the effect on the graph of $f(x) = 5x - 8$

If the y intercept is changed to + 2?

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

9. The function $y = 10x - 12$, 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.



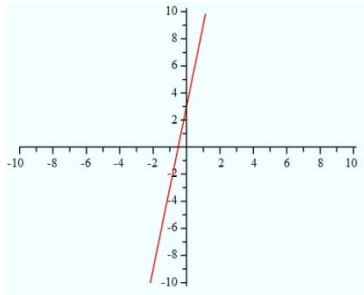
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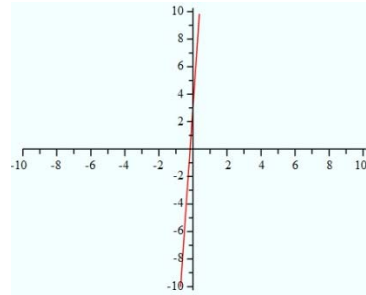
10. The graph of a line that contains the points $(-1, -6)$ and $(4, 9)$ is shown below.

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

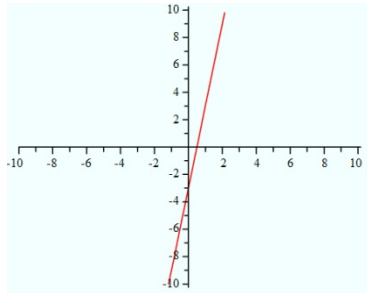
a)



b)



c)



d)

