

TASK 2.7.3: CHANGE, CHANGE, CHANGE**Solutions**

Participants' results will vary in both exercises. Key concepts in "Change, Change, Change" include:

- The first change affects slope, a change from 3:1 to 5:1.
- The second change affects the y-intercept from 12 to 18.
- The third change requires students to determine a change in the table affecting the y-intercept with a slope unchanged.

TASK 2.7.3: CHANGE, CHANGE, CHANGE

1. Write a story that fits the function rule $y = 3x + 12$. Create a table of values to match the story situation and sketch a graph of the information. Be sure to label axes on the graph.
2. The function has changed! The function rule now reads $y = 5x + 12$. Change the story you wrote above to match the changes in the function. Record the new story below.
3. Explain what parts of your story changed and how that matched the change in the function rule. Be sure to include the changes in the table and graph.
4. The story changes again. The function rule now reads $y = 3x + 18$. Change your original story to match the changes in the rule. Explain how this change affects the graph and table that corresponded to the original story in problem #1.
5. The table below contains sample data points from a continuous linear situation. Write a story about a situation that generates the data in the table. Label each of the columns in the table. Include the rate of change and the intercepts in your story. Sketch a graph of your story, and create the function rule for the table.

0	30
4	22
8	14
12	6
15	0

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6. The table has changed. Explain how the changes in the table would change your story, your graph, and the function rule.

0	35
4	27
8	19
12	11
15	5