## Math Grade 8 F

## Grade Level Standard(s):

## KY.8.G. 3

## Materials:

- Math 8 F Graph 4
- Math 8 F Attainment Task Questions for Student Use


## Response Code:

- Indicate the answer provided by the student.


## Text Coding:

- "Quotation marks" indicate the script that the teacher should read to the student.
- Italicized text provides further direction for the test administrator.
- Words in parenthesis ( ) are optional; they may replace or be read in addition to the word(s) immediately preceding.
a.

Harley turned the triangle $90^{\circ}$ clockwise by making $x$ negative then reversing the values for $x$ and $y$.

b.

Harley flipped the triangle over the $y$ axis by making each of the values for $x$ and $y$ negative in each point.

c.

Harley slid the triangle up by adding 2 to the $y$ values for each point.


## Math Grade 8 F

Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 10 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, "We are about to start the task, and I am going to ask you some questions."

All questions from this task are available for presentation to the student in the supplemental material Math 8 F Attainment Task Questions for Student Use.
"Harley is working in her math class. Harley's teacher draws a triangle on the graph. She asks Harley to draw a translation of the triangle."

Present the student with Math 8 F Graph 4.
5. "Which of the following describes the process Harley used to translate the teacher's triangle?"

| Response Option | Response Rationale |
| :--- | :--- |
| a. Harley turned the triangle $90^{\circ}$ clockwise by making x negative <br> then reversing the values for x and y. | The student attempts to describe the effect of the translation on <br> the two-dimensional figures but incorrectly describes a rotation. |
| b. Harley flipped the triangle over the y axis by making each of <br> the values for x and y negative in each point. | The student attempts to describe the effect of the translation on <br> the two-dimensional figures but incorrectly describes a reflection. |
| c. Harley slid the triangle up by adding 2 to the y values for each <br> point. (Correct) | The student describes the effect of the translation on the two- <br> dimensional figures using coordinates. |
| Depth of Knowledge (DOK) 3 |  |

Math 8 F Graph 4


## Math Grade 8 F

## Math 8 F Attainment Task Questions for Student Use

5. Which of the following describes the process Harley used to translate the teacher's triangle?

## Math Grade 8 F

Kentucky Academic Standard: KY.8.G. 3 Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates. MP.3, MP.5, MP. 6

Alternate Assessment Target: Limit to translations, rotations and reflections of quadrilaterals (e.g., rectangles, parallelograms, trapezoids) and triangles.

| Student Group | Number of Students* | Percent Correct |
| :--- | :---: | :---: |
|  |  |  |
| All students | 567 | $48.32 \%$ |
|  |  |  |
| Gender | 200 | $47.50 \%$ |
| Female | 367 | $48.77 \%$ |
| Male |  |  |
|  | 76 | $52.63 \%$ |
| Ethnicity | $<10$ | Not Reported |
| African American | $<10$ | Not Reported |
| American Indian or Alaska Native | $<10$ | Not Reported |
| Asian | $<10$ | Not Reported |
| Hispanic or Latino | 417 | $49.64 \%$ |
| Native Hawaiian or Pacific Islander | 62 | $38.71 \%$ |
| White (non-Hispanic) |  |  |
| Two or More Races | 29 | $58.62 \%$ |
|  |  |  |
| English Learner | 448 | $48.44 \%$ |
|  |  |  |
| Economically Disadvantaged |  |  |

*Number of Students that attempted the item

