Math Grade 8 F

Grade Level Standard(s):

KY.8.F.3

Materials:

• 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. Graph A, because it is a curved line.



b. Graph B, because it is a line through the origin with two curves.



c. Graph C, because it is a straight line.



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 <u>Math 8 F Attainment Task</u> <u>Questions for Student Use</u>.

"Harley is working in her math class. She is given a function for a line; $y = \frac{1}{2} x$."

Present the student with the student picture response options (on opposite page) and ask the following question:

1. "Which of the following graphs represents the function $y = \frac{1}{2}x$ and why?"

Response Option	Response Rationale	
a. Graph A, because it is a curved line.	The student attempts to identify the graph associated with the equation but incorrectly identifies the equation representing a parabola.	
b. Graph B, because it is a line through the origin with two curves.	The student attempts to identify the graph associated with the equation but incorrectly identifies the graph representing a cubic equation.	
c. Graph C, because it is a straight line. (Correct)	The student correctly identifies the equation as that of a straight line.	
Depth of Knowledge (DOK) 1		

Alternate Kentucky Summative Assessment

Math 8 F Attainment Task Questions for Student Use

1. Which of the following graphs represents the function $y = \frac{1}{2}x$ and why?

Kentucky Academic Standard: KY.8.F.3 Understand properties of linear functions.

a. Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line.

b. Identify and give examples of functions that are not linear. **MP.7**

Alternate Assessment Target: Limit full standard to linear functions with intercepts between negative 20 and 20.

Student Group	Number of Students*	Percent Correct
All Students	554	53.61%
Gender		
Female	176	49.43%
Male	378	55.56%
Ethnicity		
African American	74	58.11%
American Indian or Alaska Native	<10	Not Reported
Asian	10	70.00%
Hispanic of Latino	<10	Not Reported
Native Hawaiian of Pacific Islander	<10	Not Reported
White (Non-Hispanic)	402	52.99%
Two or More Races	67	50.75%
English Learner	28	50.00%
Economically Disadvantaged	423	54.37%

*Number of Students that attempted the item