

Math Grade 10 F

Grade Level Standard(s):

KY.HS.A.16

Required Assessment Materials:

- Math 10 F Reference Sheet
- Math 10 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.

Subtract 1 on both sides

$$-1$$

b.

Add 1 on both sides

$$+1$$

c.

Multiply by 1 on both sides

$$\times 1$$

Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 9 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 material Math 10 F Attainment Task Questions for Student Use.

“Rosa and her friends are going to bowl at Buster’s Bowling Lanes. While bowling Rosa needs to rent a pair of bowling shoes that cost \$1. She will then pay \$3 for each game she bowls”.

Present the student with Math 10 F Reference Sheet 2.

“Rosa would like to spend \$7 on bowling. She constructed an equation to help her calculate how many games she can bowl.”

2. “What would be the first step Rosa would need to take to solve for the variable g in the equation?”

Response Option	Response Rationale
a. Subtract 1 on both sides (Correct)	<i>The student correctly identifies the general method for solving linear equations by isolating the variable, maintaining the equality of numbers on either side of the equal sign, and subtracts 1 from each side.</i>
b. Add 1 on both sides	<i>The student correctly identifies the general method for solving linear equations by isolating the variable, maintaining the equality of numbers on either side of the equal sign, but adds 1 to each side which does not move the student toward the solution.</i>
c. Multiply by 1 on both sides	<i>The student correctly identifies the general method for solving linear equations by isolating the variable, maintaining the equality of numbers on either side of the equal sign, but multiplies each side by 1 which does not change the equation.</i>
Depth of Knowledge (DOK) 1	

Math 10 F Reference Sheet

2) $3g + 1 = 7$

Where g = the number of games bowled

Math 10 F Attainment Task Questions for Student Use

2. What would be the first step Rosa would need to take to solve for the variable g in the equation?

Kentucky Academic Standard: KY.HS.A.16 - Understand each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
MP.1, MP.3

Alternate Assessment Target: *Limit coefficients to integers from negative 20 to 20.*

Student Group	Number of Students*	Percent Correct #2
All Students	521	29.37%
Gender		
Female	167	31.14%
Male	354	28.53%
Ethnicity		
African American	64	32.81%
American Indian or Alaska Native	<10	Not Reported
Asian	11	45.45%
Hispanic of Latino	41	24.39%
Native Hawaiian of Pacific Islander	<10	Not Reported
White (Non-Hispanic)	379	28.23%
Two or More Races	26	38.46%
English Learner	30	30.00%
Economically Disadvantaged	362	28.73%

*Number of students that attempted the item