

MAT.07.CR.1.000EE.D.165

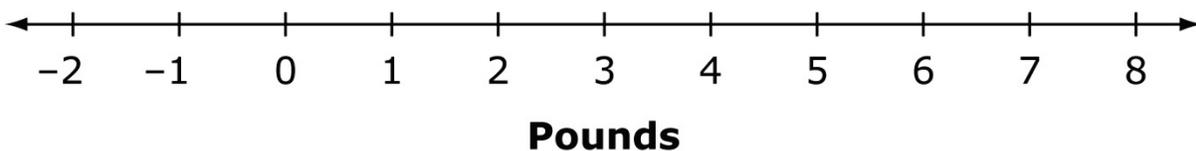
Sample Item ID:	MAT.07.CR.1.000EE.D.165
Grade:	07
Claim(s):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
Assessment Target(s):	1 D: Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Content Domain:	Expressions and Equations
Standard(s):	7.EE.4
Mathematical Practice(s):	1, 4, 6
DOK:	2
Item Type:	TE
Score Points:	3
Difficulty:	M
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-Specific Attributes (e.g., accessibility issues):	
Notes:	TE Template: Selecting points and ranges on a number line; Part of this item requires AI scoring.

David wants to buy 2 pineapples and some bananas.

- The price of 1 pineapple is \$2.99.
- The price of bananas is \$0.67 per pound.

David wants to spend less than \$10.00. Write an inequality that represents the number of pounds of bananas, b , David can buy.

On the number line below, draw a graph that represents the number of pounds of bananas David can buy.



Grade 7 Mathematics Sample CR Item

Sample Top-Score Response:

$$b < 6$$

The graph should be a line segment with an open or closed circle at 0 and an open circle at 6.

Scoring Rubric:

Responses to this item will receive 0–3 points, based on the following:

- 3 points:** The student has thorough understanding of how to solve a real-life problem involving inequalities and how to graph inequalities on a number line. This is shown by the student determining and graphing the solution.
- 2 points:** The student has thorough understanding of how to solve a real-life problem involving inequalities and partial understanding of how to graph inequalities on a number line. This is shown by the student correctly determining the solution but having incorrect endpoint(s) on the graph.
- 1 point:** The student has an understanding of how to solve a real-life problem but limited understanding of how to graph the solution. This is shown by the student determining the solution but making two or more errors in graphing the solution. **OR** The student has an understanding of how to graph inequalities but limited understanding of how to solve a real-life problem involving inequalities. This is shown by the student correctly graphing an incorrect solution to the real-life problem.
- 0 points:** The student shows little or no understanding of how to solve a real-life problem involving inequalities or how to graph inequalities.

Template: Selecting points and ranges on a number line

Item Code: MAT.07.CR.1.000EE.D.165

Interaction Space Parameters:

- i. Type inequality into a text box
- ii. Graph the solution on a provided number line

Scoring Data:

{ $b < 6$; The graph should be a line segment with a closed circle at 0 and an open circle at 6.}

{0 errors = 2 points}

{1 error = 1 point}

{2 errors = 0 points}