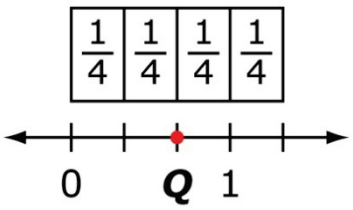
MAT.03.ER.3.000NF.E.216 Claim 3

Sample Item ID:	MAT.03.ER.3.000NF.E.216
Grade:	03
Primary Claim:	**Claim 3: Communicating Reasoning** Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.
Secondary Claim(s):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
Primary Content Domain:	Number and Operations—Fractions
Secondary Content Domain(s):	
Assessment Target(s):	3 E: Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is. 1 F: Develop understanding of fractions as numbers.
Standard(s):	03.NF.2
Mathematical Practice(s):	1, 2, 4, 5
DOK:	3, 6
Item Type:	ER
Score Points:	2
Difficulty:	L
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-Specific Attributes (e.g., accessibility issues):	
Notes:	

Eva thinks that Q shows $\frac{2}{4}$ on the number line. Eva labeled the number line with unit fractions to show how she determined her answer.



Is Eva's drawing correct? Explain your reasoning using words, numbers, and/or pictures.

Sample Top-Score Response:

Eva's drawing is not correct. The point that is represented on the number line is $\frac{2}{3}$.

$\frac{2}{4}$ would be represented on a number-line diagram by marking off 2 lengths, each of length $\frac{1}{4}$ from 0. As shown, the endpoint would be $\frac{2}{3}$ because the intervals are in thirds.

Scoring Rubric:

Responses to this item will receive 0–2 points based on the following***:***

2 points: The student shows thorough communication of distinguishing correct reasoning from that which is flawed by giving a clear explanation using words, numbers, and/or pictures of fractions and their representation on the number line.

1 point: The student shows partial communication of distinguishing correct reasoning from that which is flawed by giving a partial or incomplete explanation that may not clearly explain fractions and their representation on the number line.

0 points: The student demonstrates little or no communication of distinguishing correct reasoning from that which is flawed on the number line and representation of the fraction.