

MAT.04.ER.3.0000A.A.512 Claim 3

Sample Item Id:	MAT.04.ER.3.0000A.A.512
Grade:	04
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:	Operations and Algebraic Thinking
Secondary Content Domain(S):	
Assessment Target(S):	3A: Test propositions or conjectures with specific examples. 1B: Gain familiarity with factors and multiples.
Standard(S):	4.OA.4
Mathematical Practice(S):	1, 2, 3, 8
DOK:	2
Item Type:	ER
Score Points:	2
Difficulty:	H
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-Specific Attributes (E.G., Accessibility Issues):	
Notes:	Part of PT set

Peter made the statement shown below.

“The number 32 is a multiple of 8. That means all of the factors of 8 are also factors of 32.”

Is Peter’s statement correct? In the space below, use numbers and words to explain why or why not.

Sample Top-Score Response:

Peter's statement is correct. The factors of 8 are 1, 2, 4, and 8. The factors of 32 are 1, 2, 4, 8, 16, and 32.

Scoring Rubric:

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

- 2 points:** The student has a thorough understanding of the relationship between factors and multiples of numbers. The student correctly answers both parts and provides an explanation of reasoning that is thorough and correct for each part.
- 1 point:** The student has a partial understanding of the relationship between factors and multiples of numbers. The student indicates that Peter's statement is correct, but provides an explanation of reasoning that is incomplete or contains a flaw.
- 0 points:** The student has no understanding of the relationship between factors and multiples of numbers. The student does not complete any part correctly. Identifying Peter's statement as correct is not sufficient, by itself, to earn any credit.