



2012-2013
Mathematics Benchmark 3
Constructed Response Marking Scheme

Grade: 8

Item Description: Congruent Triangle

Mathematical Content

Total: 1 point

Antonio

Mathematical Process

Total: 2 points

2 points:

- Student demonstrates an understanding of congruency using a visual model and/or a written explanation to explicitly explain that the sequence of transformations Brittany used would not result in the proving that $\triangle ABC$ and $\triangle DEF$ are congruent.
- Example:
 - Student explains the resulting triangle is not in the same position as $\triangle ABC$ to prove congruency.
 - Student explains that the sequence of transformations is incomplete and an additional transformation of rotation is needed to prove congruency of the two given triangles or suggest a new set of transformation that result in proving congruency.

1 point:

- Student uses a visual model to correctly explain Brittany's mistake, but written explanation is incorrect
- Student understands some component of congruency, (i.e. the triangles have to be on top of one another), but explanation is lacking connection to her strategy
- Student lacked explanation on what Brittany's mistake was, but was able to explain why Antonio's steps were correct.

0 point:

- Misconception of congruency being the same as similar is evident
- Student provides a completely incorrect explanation or justification, one that cannot be interpreted, or there is no response.