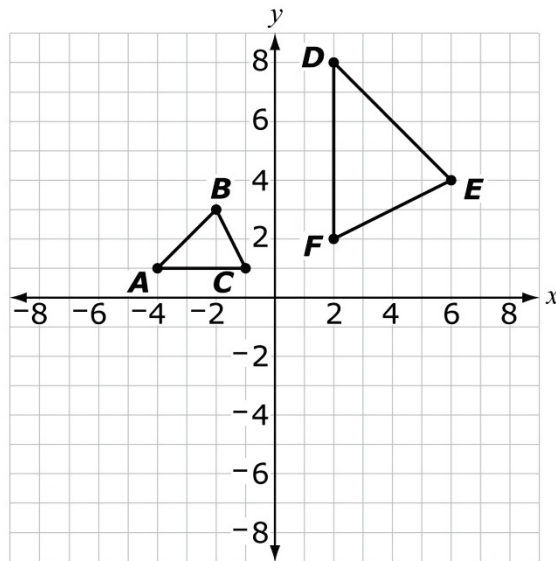


MAT.08.ER.3.0000G.B.010 Claim 3

Sample Item ID:	MAT.08.ER.3.0000G.B.010
Grade:	08
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:	Geometry
Secondary Content Domain(s):	
Assessment Target(s):	3 B: Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures. 1 G: Understand congruence and similarity using physical models, transparencies, or geometry software.
Standard(s):	8.G.4
Mathematical Practice(s):	1, 3, 7
DOK:	3
Item Type:	ER
Score Points:	2
Difficulty:	M
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-Specific Attributes (e.g., accessibility issues):	Rotations are only of multiples of 90 degrees about the origin. Reflections are only over the x- and y- axes. Dilations are only with the origin as the center. There are at most three transformations in a sequence of transformations. Limited to the coordinate plane.
Notes:	Part of PT set

Triangles ABC and DEF are shown on this coordinate grid.



Describe a sequence of transformations that verify that these triangles are geometrically similar.

Sample Top-Score Response:

Triangle ABC is rotated 90 degrees clockwise about the origin and then dilated by a scale factor of 2 to make triangle DEF .

Scoring Rubric:

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

2 points: The student shows a thorough understanding of transformations. The student correct describes the transformations that take triangle ABC to triangle DEF .

1 point: The student shows a partial understanding of transformations. The student identifies either the rotation or dilation.

0 points: The student shows inconsistent or no understanding of transformations.