

Task Model 2

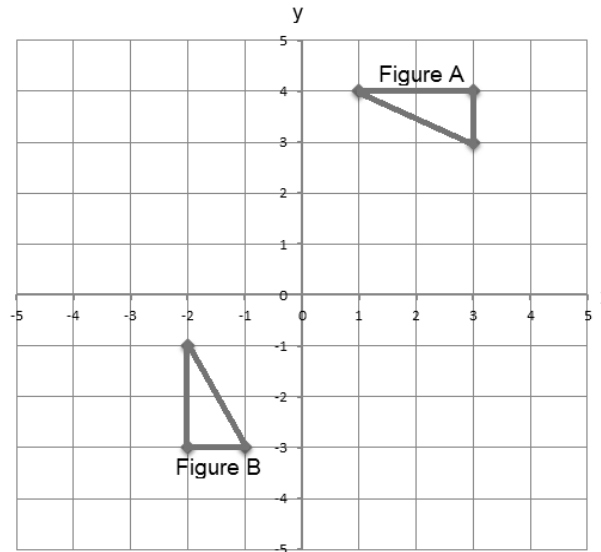
DOK Levels 3, 4

Target B:
Construct, autonomously, chains of reasoning that will justify or refute conjectures

Example Item 2 (Grade 8):

Primary Target 3B (Content Domain G), Secondary Target 1G (CCSS 8.G.2), Tertiary Target 3F

Two figures are shown on the coordinate grid.



Prove that Figure A and Figure B are congruent.

Describe three single transformations that, when performed, would transform Figure A to Figure B. In your response, be sure to identify the transformations in the order they are performed.

Rubric:

(2 points) The student describes three transformations with sufficient detail to prove that Figure A and Figure B are congruent (e.g., see exemplars).

(1 point) The student either describes all three transformations in general terms, without the degree of precision necessary to prove congruency (e.g., rotation, reflection, and translation) or correctly describes two out of three transformations and incorrectly describes the third (e.g., states the rotation is 180° instead of 90° or translates in the wrong direction or an incorrect number of units).

Exemplars⁴:

1st Transformation is to reflect over the y -axis. 2nd Transformation is to rotate 90° counter-clockwise about the origin. 3rd Transformation is to translate right by 2 units.

1st Transformation is to reflect over the x -axis. 2nd Transformation is to rotate 90° clockwise about the origin. 3rd Transformation is to translate right by 2 units.

Response Type: Short Text (hand scored)

⁴ Exemplars only represent possible solutions. Typically, many other solutions/responses may receive full credit. The full range of acceptable responses is determined during rangefinding and/or scoring validation.