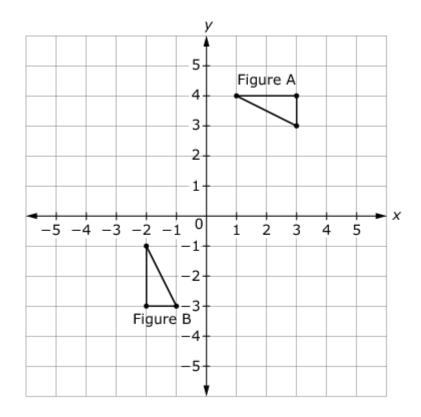


Item	Claim	Domain	Target	DOK	CONTENT	MP	Key
#20	3	G	В	3	8.G.A.2	1, 2, 3	See exemplar

1841



Two figures are shown on the coordinate grid.



Show that Figure A and Figure B are congruent by describing a sequence of basic transformations that maps Figure A onto Figure B. In your response, be sure to identify the transformations in the order they are performed.

Exemplar 1: 1^{st} transformation is to reflect over the *y*-axis. 2^{nd} transformation is to rotate 90° counter-clockwise about the origin. 3^{rd} transformation is to translate right by 2 units.



Grade 8 Mathematics

(Item #20 continued)

Exemplar 2: 1^{st} transformation is to reflect over the *x*-axis. 2^{nd} transformation is to rotate 90° clockwise about the origin. 3^{rd} transformation is to translate right by 2 units.

Other correct series of transformations are possible.

Rubric:

(2 points) Student describes three transformations with sufficient detail to prove that Figure A and Figure B are congruent.

(1 point) 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).