

Item	Claim	Domain	Target	DOK	CONTENT	MP	Key
#16	3	G	G	3	8.G.A.3	2	See exemplar

## 1845



A sequence of transformations is applied to a polygon. Select **all** statements which indicate a sequence of transformations where the resulting polygon has an area greater than the original polygon.

- Reflect over the  $x$ -axis, dilate about the origin by a scale factor of  $\frac{1}{2}$ , translate up 5 units.
- Rotate  $90^\circ$  counterclockwise around the origin, dilate about the origin by a scale factor of  $\frac{3}{2}$ .
- Dilate about the origin by a scale factor of  $\frac{2}{3}$ , rotate  $180^\circ$  clockwise around the origin, translate down 2 units.
- Dilate about the origin by a scale factor of 2, reflect over the  $y$ -axis, dilate about the origin by a scale factor of  $\frac{2}{3}$ .

**Exemplar:** (shown at right)

**Rubric:** (1 point) Student correctly selects the second and fourth statements.

- Reflect over the  $x$ -axis, dilate about the origin by a scale factor of  $\frac{1}{2}$ , translate up 5 units.
- Rotate  $90^\circ$  counterclockwise around the origin, dilate about the origin by a scale factor of  $\frac{3}{2}$ .
- Dilate about the origin by a scale factor of  $\frac{2}{3}$ , rotate  $180^\circ$  clockwise around the origin, translate down 2 units.
- Dilate about the origin by a scale factor of 2, reflect over the  $y$ -axis, dilate about the origin by a scale factor of  $\frac{2}{3}$ .