

<p>Task Model 4</p> <p>Response Type: Hot Spot</p> <p>DOK Level 2</p> <p>8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>Evidence Required: 4. The student describes the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p> <p>Tools: Calculator</p>	<p>Prompt Features: The student is prompted to give the coordinates of the image of a given point or set of points (or the quadrant that one or more coordinates is located in) after a sequence of transformations.</p> <p>Stimulus Guidelines:</p> <ul style="list-style-type: none"> • Transformations can include rotation, reflection, translation, and dilation. • A figure should contain no more than eight vertices. • Item will ask for a coordinate of the image of the figure after the transformation is applied, up to a maximum of three coordinates. • Item difficulty can be adjusted via these example methods: <ul style="list-style-type: none"> ○ Varying the type and number of transformations ○ Inclusion of dilations ○ Number of vertices on figure ○ Number of coordinates that must be supplied by student. <p>TM4</p> <p>Stimulus: The student is presented with a figure on a coordinate plane, along with a description of a sequence of transformations.</p> <p>Example Stem: Triangle ABC is reflected across the x-axis, and dilated by a scale factor of 2, with the origin as the center of the dilation.</p> <div data-bbox="646 1024 1295 1675" data-label="Figure"> </div> <p>Click the numbers to give the coordinates of vertices $A'B'C'$.</p> <p>Interaction: The student will click on numbers and positive/negative signs to give coordinates.</p>
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