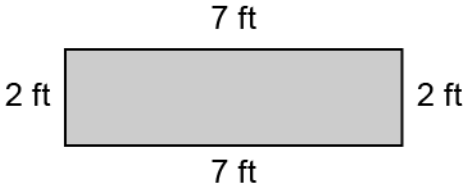
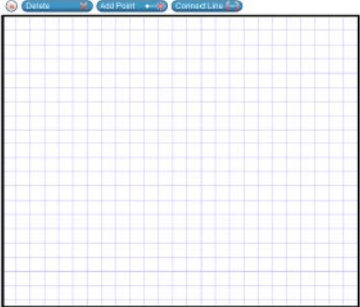

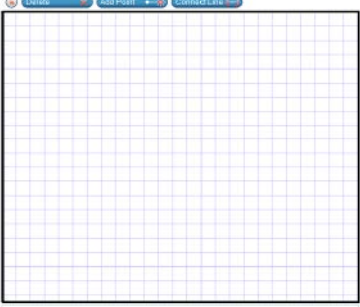


Content Standard	<p><b>MAFS.4.MD Measurement and Data</b></p> <p><b>MAFS.4.MD.1</b> Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p><b>MAFS.4.MD.1.3</b> Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p>	
Assessment Limits	<p>Figures are limited to rectangles.          Fractions are limited to like denominators.          Products of factor pairs are limited to the range 1–100.          Division is limited to 2-digit by 1-digit, or 2-digit by 2-digit, where one number is multiple of 10.          Addition and subtraction within 1,000.          When constructing rectangles, the minimum grid size is 20 pixels, and in the context of a situation, one grid must be labeled with the appropriate dimension. That dimension should be “1 _____,” as items at this standard should not assess scale.</p>	
Calculator	No	
Acceptable Response Mechanisms	Equation Response Graphic Response – Drawing/Graphing Multi-Select Response	
Context	Allowable	
Example		
Context	Both length and width are provided in stem or as options. For area, dimensions are 1-digit by 2-digit. For perimeter, dimensions are 2-digit by 3-digit.	
Context easier	All four dimensions are provided in stem or options as art. For area, dimensions are 1-digit by 2-digit. For perimeter, dimensions are 2-digit by 2-digit or less.	
Context more difficult	Generally, unless restricted by the task demand, problem includes at least one unknown dimension. For area, dimensions are 2-digit by 2-digit. For perimeter, dimensions are 3-digit by 3-digit or less.	

Sample Item Stem	Response Mechanism	Notes, Comments
<p>A rectangular rug, with dimensions given in feet (ft), is shown.</p> <div style="text-align: center;">  </div> <p>What is the area of the rug in square feet?</p>	Equation Response	
<p>A store owner needs a rug with an area of at least 420 square feet.</p> <p>Select all the sizes of rugs the store owner could choose.</p> <ul style="list-style-type: none"> <li><input type="radio"/> 40 feet x 20 feet</li> <li><input type="radio"/> 60 feet x 7 feet</li> <li><input type="radio"/> 70 feet x 6 feet</li> <li><input type="radio"/> 4 feet x 20 feet</li> <li><input type="radio"/> 20 feet x 4 feet</li> </ul>	Multi-Select Response	
<p>The perimeter of a rectangular rug is 20 feet.</p> <p>Use the Connect Line tool to draw a rectangle that shows one possible size of the rug.</p> <div style="text-align: center;">  </div>	Graphic Response – Drawing/Graphing	
<p>A rectangular school gym has a length of 120 feet and a perimeter of 520 feet.</p> <p>What is the width, in feet, of the school gym?</p>	Equation Response	

<p>A store owner wants to buy a new rectangular rug. The rug must be between 55 and 65 square feet and the side length must be less than 10 feet long.</p> <p>Use the Connect Line tool to draw a rectangle that could represent the new rug.</p> 	<p>Graphic Response – Drawing/Graphing</p>	
<p>A store owner wants to buy a new rectangular rug. The rug must be between 97 and 107 square feet. The rug must be less than 10 feet long.</p> <p>Use the Connect Line tool to draw a rectangle that could represent the new rug.</p> 	<p>Graphic Response – Drawing/Graphing</p>	