Content Standard	***MAFS.6.RP*** *Ratios and Proportional Relationships.* ***MAFS.6.RP.1*** *Understand ratio concepts and use ratio reasoning to solve problems.* ***MAFS.6.RP.1.3*** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. ***MAFS.6.RP.1.3a*** Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. ***MAFS.6.RP.1.3b*** Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took* 7 *hours to mow* 4 *lawns, then at that rate, how many lawns could be mowed in* 35 *hours? At what rate were lawns being mowed?* ***MAFS.6.RP.1.3c*** Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $\frac{30}{100}$ times the quantity); solve problems involving finding the whole, given a part and the percent. ***MAFS.6.RP.1.3d*** Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. ***MAFS.6.RP.1.3e*** Understand the concept of Pi as the ratio of the circumference of a circle to its diameter.
Assessment Limits	Rates can be expressed as fractions, with ":" or with words. Units may be the same or different across the two quantities. Percent found as a rate per 100. Quadrant I only for *MAFS.6.RP.1.3a.*
Calculator	No
Item Types	Equation Editor GRID Multiple Choice Table Item
Context	Allowable

Sample Item	Item Type
Tom knows that in his school 10 out of every 85 students are left-handed. There are 391 students in Tom's school. How many students in Tom's school are left-handed?	Equation Editor
The standard length of film on a film reel is 300 meters. On the first day of shooting a movie, a director uses 30% of the film on one reel. How long is the strip of film that was used?	Equation Editor

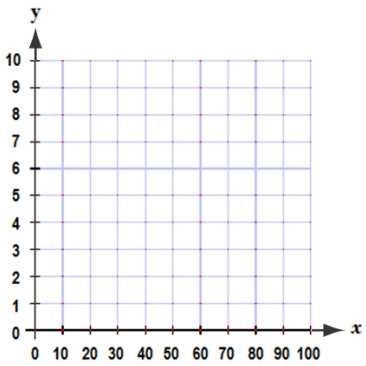
<table>
<tr><th>Sample Item</th><th>Item Type</th></tr>
<tr><td>A paint mixture uses a specific blue to green ratio.

Complete the table using the ratio given.

<table>
<tr><th colspan="2">Paint Mixture</th></tr>
<tr><th>Blue Paint</th><th>Green Paint</th></tr>
<tr><td>2</td><td>5</td></tr>
<tr><td>4</td><td></td></tr>
<tr><td>6</td><td></td></tr>
</table>
</td><td>Table Item</td></tr>
<tr><td>A table of equivalent ratios is shown.

<table>
<tr><th colspan="2">Ratios</th></tr>
<tr><td>2</td><td>20</td></tr>
<tr><td>4</td><td>40</td></tr>
<tr><td>6</td><td>60</td></tr>
<tr><td>8</td><td>80</td></tr>
</table>

Use the Add Point tool to plot these points on the coordinate grid.

 
</td><td>GRID</td></tr>
<tr><td>In a circle, which ratio is equivalent to π?

Ⓐ radius to area
Ⓑ diameter to radius
Ⓒ area to circumference
Ⓓ circumference to diameter</td><td>Multiple Choice</td></tr>
</table>