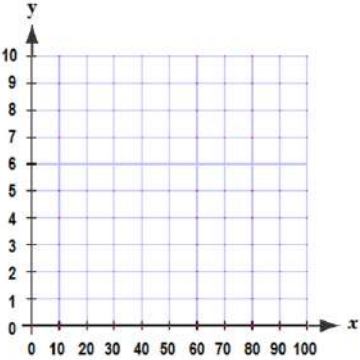


Content Standard	<p>MAFS.6.RP Ratios and Proportional Relationships.</p> <p>MAFS.6.RP.1 Understand ratio concepts and use ratio reasoning to solve problems.</p> <p>MAFS.6.RP.1.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>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.</p> <p>MAFS.6.RP.1.3b Solve unit rate problems including those involving unit pricing and constant speed. <i>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?</i></p> <p>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.</p> <p>MAFS.6.RP.1.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p> <p>MAFS.6.RP.1.3e Understand the concept of Pi as the ratio of the circumference of a circle to its diameter.</p>
Assessment Limits	<p>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 <i>MAFS.6.RP.1.3a</i>.</p>
Calculator	No
Item Types	<p>Equation Editor GRID Multiple Choice Table Item</p>
Context	Allowable
Sample Item	Item Type
<p>Tom knows that in his school 10 out of every 85 students are left-handed. There are 391 students in Tom’s school.</p> <p>How many students in Tom’s school are left-handed?</p>	Equation Editor
<p>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?</p>	Equation Editor

Sample Item	Item Type										
<p>A paint mixture uses a specific blue to green ratio.</p> <p>Complete the table using the ratio given.</p> <table border="1" data-bbox="191 380 477 600"> <thead> <tr> <th colspan="2">Paint Mixture</th> </tr> <tr> <th>Blue Paint</th> <th>Green Paint</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>5</td> </tr> <tr> <td>4</td> <td></td> </tr> <tr> <td>6</td> <td></td> </tr> </tbody> </table>	Paint Mixture		Blue Paint	Green Paint	2	5	4		6		<p>Table Item</p>
Paint Mixture											
Blue Paint	Green Paint										
2	5										
4											
6											
<p>A table of equivalent ratios is shown.</p> <table border="1" data-bbox="191 716 345 896"> <thead> <tr> <th colspan="2">Ratios</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Use the Add Point tool to plot these points on the coordinate grid.</p> 	Ratios		2	20	4	40	6	60	8	80	<p>GRID</p>
Ratios											
2	20										
4	40										
6	60										
8	80										
<p>In a circle, which ratio is equivalent to π?</p> <ul style="list-style-type: none"> (A) radius to area (B) diameter to radius (C) area to circumference (D) circumference to diameter 	<p>Multiple Choice</p>										