

Essential Question: How can you find two ratios that describe the same relationship?

Questions/Main Ideas:	Notes:
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Vocabulary	Equivalent ratios - two ratios that describe the same relationship
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	Ratio table - organization of ratios
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Example 1	Completing Ratio Tables
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	<p>Find the missing value(s) in each ratio table. Then write the equivalent ratios.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>a.</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #d9ead3;">Pens</td><td>1</td><td>2</td><td></td></tr> <tr><td style="background-color: #d9ead3;">Pencils</td><td>3</td><td></td><td>9</td></tr> </table> </div> <div style="text-align: center;"> <p>b.</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #d9ead3;">Dogs</td><td>4</td><td></td><td>24</td></tr> <tr><td style="background-color: #d9ead3;">Cats</td><td>6</td><td>12</td><td></td></tr> </table> </div> </div>	Pens	1	2		Pencils	3		9	Dogs	4		24	Cats	6	12	
Pens	1	2															
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	<p>Find the missing value(s) in the ratio table. Then write the equivalent ratios.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1.</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #d9ead3;">Plantains</td><td>4</td><td></td><td>12</td></tr> <tr><td style="background-color: #d9ead3;">Bananas</td><td>3</td><td>6</td><td></td></tr> </table> </div> <div style="text-align: center;"> <p>2.</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="background-color: #d9ead3;">Euros</td><td>5</td><td>10</td><td></td></tr> <tr><td style="background-color: #d9ead3;">Dollars</td><td>4</td><td></td><td>32</td></tr> </table> </div> </div>	Plantains	4		12	Bananas	3	6		Euros	5	10		Dollars	4		32
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	<p>A jar of marbles is shown.</p> <div style="text-align: center;">  </div> <p>Complete the table to show the ratios.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <tr><th colspan="3">Ratios of Marbles</th></tr> <tr><td>Red: Green</td><td></td><td></td></tr> <tr><td>Blue: Total Marbles</td><td></td><td></td></tr> </table>	Ratios of Marbles			Red: Green			Blue: Total Marbles		
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Example 2 Making a Ratio Table

You are making sugar water for your hummingbird feeder. A website indicates to use 4 parts of water for every 1 part of sugar. You use 20 cups of water. How much sugar do you need?

You can solve this problem by using equivalent ratios. The ratio of water to sugar is 4 parts to 1 part. So, for every 4 cups of water, you need 1 cup of sugar. Find an equivalent ratio with 20 parts water.

Water (cups)					
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Sugar (cups)					
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Example 3 Using a Ratio Table

The nutrition facts label on a box of crackers shows that there are 240 milligrams of sodium in every 36 crackers.

a. You eat 15 crackers. How much sodium do you consume?

The ratio of sodium to crackers is 240 to 36. Use a ratio table to find an equivalent ratio with 15 crackers.

Sodium (milligrams)	240	120	20	100
Crackers	36	18	3	15

Diagram showing operations: $\div 2$, $\div 6$, $\times 5$ between columns.



The ratio 100 to 15 is equivalent to 240 to 36.

❖ So, you consume 100 milligrams of sodium.

FSA Practice Items

A paint mixture uses a specific blue to green ratio.

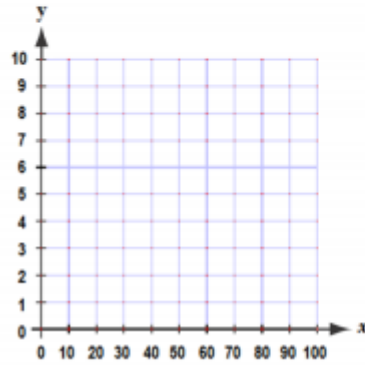
Complete the table using the ratio given.

Paint Mixture	
Blue Paint	Green Paint
2	5
4	
6	

A table of equivalent ratios is shown.

Ratios	
2	20
4	40
6	60
8	80

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



Summary: Students should write a summary reflecting the above essential question.
