

Name:

Date:

Topic:

Class:

Main Ideas/Questions	Notes/Examples	
<p>What is a RATIO?</p>	<ul style="list-style-type: none"> <li>A _____ of _____ quantities.</li> <li>Ways to represent a ratio: _____; _____; _____</li> <li>Ratios can be _____!</li> </ul>	
	<p><b>Example:</b> A music store has 40 trumpets, 39 clarinets, 24 violins, 51 flutes, and 16 trombones in stock. Write each ratio in simplest form.</p>	
	<p>1. trumpets to violins</p>	<p>2. flutes to clarinets</p>
	<p>3. trombones to trumpets</p>	<p>4. violins to total instruments</p>
<p>EXTENDED RATIOS</p>	<ul style="list-style-type: none"> <li>A _____ of _____ quantities.</li> <li>Extended ratios are written as _____.</li> </ul>	
	<p><b>USING EXTENDED RATIOS FOR ANGLE AND SIDE MEASURES:</b></p>	
	<p>5. The ratio of two complementary angles is 3:7. Find the measures of both angles.</p>	<p>6. The ratio of two supplementary angles is 4:1. Find the measures of both angles.</p>
	<p>7. The ratio of the measures of the angles in a triangle is 4:7:9. Find the measures of the angles.</p>	<p>8. The ratio of the measures of the angles in a triangle is 11:2:5. Find the measure of the largest angle.</p>

	<p>9. The ratio of the measures of the sides of a triangle is 2:8:9. If the perimeter of the triangle is 76 inches, find the length of each side.</p>	<p>10. The ratio of the measures of the sides of a triangle is 10:15:6. If the perimeter of the triangle is 217 meters, find the length of the shortest side.</p>
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## What is a PROPORTION?

- An \_\_\_\_\_ that states two \_\_\_\_\_ are equal.
- A proportion is written as \_\_\_\_\_
- To solve, clear fractions \_\_\_\_\_.

**Directions:** Solve each proportion by clearing the fractions

11.  $\frac{4}{x} = \frac{2}{7}$

12.  $\frac{19}{10} = \frac{x}{12}$

13.  $\frac{x-1}{6} = \frac{13}{19}$

14.  $\frac{5}{17} = \frac{19}{x+4}$

15.  $\frac{10}{2x-9} = \frac{20}{9}$

16.  $\frac{12}{18} = \frac{3x+4}{15}$

17.  $\frac{x-20}{3} = \frac{x-11}{18}$

18.  $\frac{6}{x+16} = \frac{7}{3x+3}$

19.  $\frac{5}{x-1} = \frac{x+5}{27}$

20.  $\frac{2x+5}{6} = \frac{7}{x-6}$