Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples	
What is a RATIO?	• A _____ of _____ quantities. • Ways to represent a ratio: _____; _____; _____ • Ratios can be _____!	
	Example: A music store has 40 trumpets, 39 clarinets, 24 violins, 51 flutes, and 16 trombones in stock. Write each ratio in simplest form.	
	1. trumpets to violins	**2.** flutes to clarinets
	3. trombones to trumpets	**4.** violins to total instruments
EXTENDED RATIOS	• A _____ of _____ quantities. • Extended ratios are written as _____.	
	USING EXTENDED RATIOS FOR ANGLE AND SIDE MEASURES:	
	5. The ratio of two complementary angles is 3:7. Find the measures of both angles.	**6.** The ratio of two supplementary angles is 4:1. Find the measures of both angles.
	7. The ratio of the measures of the angles in a triangle is 4:7:9. Find the measures of the angles.	**8.** The ratio of the measures of the angles in a triangle is 11:2:5. Find the measure of the largest angle.

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.

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.

What is a PROPORTION?

- An _____ that states two _____ are equal.
- A proportion is written as _____
- **Cross Product Property:** For any proportion, _____

Directions: Solve each proportion using the Cross Product Property

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