Notes 6-5 Extended Ratios in Triangles

Summary of Today's Lesson
Today we will look at something called "extended ratios," and how they can be applied to triangles.

1. Extended Ratios

Regular Ratios	Extended Ratios
Regular ratios have two numbers. A baseball player had 12 hits in 8 games.	The ratio of the sides of a triangle can have three numbers. The ratio of the sides of a triangle are $4:8:10$.

2. Using Extended Ratios

In a triangle, the ratio of the measures of three sides is $4:8:10$, and its perimeter is 198 inches. Find the lengths of the sides of the triangle.

The ratio of the measures of the sides of a triangle is $3:5:7$, and its perimeter is 450 cm. Find the measures of each side of the triangle.

The ratio of the measures of the three angles of a triangle is $4:5:6$. Find the measure of each angle of the triangle.

Assignment 6-5 Extended Ratios in Triangles

Use extended ratios to solve the following.

1. The ratio of the measures of the sides of a triangle is $5:6:9$, and its perimeter is 220 m. Find the measures of each side of the triangle.
2. The ratio of the measures of the sides of a triangle is $4:6:8$, and its perimeter is 126 ft. What are the measures of the sides of the triangle?
3. The ratio of the measures of the three angles of a triangle is $5:7:8$. Find the measure of each angle of the triangle.
4. The ratio of the measures of the three angles of a triangle is $2:5:3$. Find the measure of each angle of the triangle.