Name: _____

Using Ratios and Proportions

Exercise 1: The perimeter of the isosceles triangle ABC with vertex A is 56 cm. The ratio of CB : BA is 5:4. Find the lengths of the sides and the base of the triangle.

Exercise 2: The perimeter of rectangle ABCD is 60 centimeters. The ratio of AB :BC is 3 : 2. Find the length and width of the rectangle.

Exercise 3: Solve the following. Simplify if possible.

1) Charles worked a total of 30 hours last week. He worked 10 hours on Monday. What fraction of his work hours for the week did he complete on Monday?

2) An adult education class has 15 students. 5 are teenagers. What is the ratio of teenagers to older students?

3) Molly wants to know the height of the flagpole in front of the town hall. She sees that it casts a shadow 24 feet long. She drives a stake into the ground beside the flagpole. The stake is 4 feet high. Its shadow is 2 feet long. How tall is the flagpole? (make a drawing to help solve this problem)

4) Sandy is making cookies for a bake sale. Her recipe makes 2 dozen cookies, but she wants to take 6 dozen to the sale. If the original recipe calls for 1 teaspoon of vanilla, how much vanilla will she need for 6 dozen cookies?

5) Maria traveled 400 miles in 5 hours. How many miles did she travel per hour?

6) The scale on a map says 1 inch equals 150 miles. How many miles apart are two cities if you measure 4 miles between them?

7) Wilson spent $29.00 for 2 cans of paint. How much will she spend if she buys 7 cans at the same rate?

8) John typed 5 pages in 20 minutes. What is the ratio of typed pages to minutes?