

Name: _____

Date: _____

Algebra I

Directions: Form let statement(s), set up an algebraic equation, and solve algebraically.

1. Find two numbers whose ratio is $5 : 2$ and whose sum is 56.
2. Find two numbers whose ratio is $4 : 1$ and whose difference is 36.
3. The ratio of the number of boys in a school to the number of girls is $13 : 7$. If there are 760 students in the school, how many boys and how many girls are there?
4. Two business partners agree to share their profits in a ratio of $5 : 2$. One year the profits were \$63,000. How much did each partner receive?

5. Find the number of degrees in each angle of a triangle if the measures of the three angles are in a ratio of 2 : 5 : 8.
6. Two numbers are in a ratio of 2 : 3. If the larger number is 54, find the smaller number.
7. Two numbers are in a ratio of 4 : 5. If 25 is added to the smaller and the larger is decreased by 30, the resulting numbers are equal. Find the original numbers.
8. In a basketball foul shooting contest, the points made by John and Joe were in the ratio 3 : 7. Joe made 8 more points than John. Find the number of points made by each.