Name: _____   Date: _____

Algebra I

<u>Directions</u>: Form let statement(s), set up a proportion, and solve algebraically.

1. The numerator and denominator of a fraction are in a ratio of 3 : 4. If the numerator is increased by two and the denominator is increased by six, a new fraction is formed with a resulting value of $\frac{7}{11}$. Find the original fraction.

2. The numerator and denominator of a fraction are in a ratio of 1 : 5. If the numerator is increased by one and the denominator is decreased by three, a new fraction is formed with a resulting value of $\frac{3}{7}$. Find the original fraction.

3. The numerator and denominator of a fraction are in a ratio of 4 : 9. If the numerator is increased by two and the denominator is increased by three, a new fraction is formed with a resulting value of $\frac{1}{2}$. Find the original fraction.

4. The numerator and denominator of a fraction are in a ratio of 12 : 1. If the numerator is decreased by six and the denominator is increased by five, a new fraction is formed with a resulting value of $\frac{18}{7}$. Find the original fraction.

5. The numerator and denominator of a fraction are in a ratio of 3 : 10. If the numerator is decreased by three and the denominator is increased by four, a new fraction is formed with a resulting value of $\frac{3}{17}$. Find the original fraction.

6. The numerator and denominator of a fraction are in a ratio of 5 : 9. If the numerator is increased by two and the denominator is decreased by one, a new fraction is formed with a resulting value of $\frac{22}{35}$. Find the original fraction.

7. The numerator and denominator of a fraction are in a ratio of 11 : 13. If the numerator is increased by six and the denominator is decreased by four, a new fraction is formed with a resulting value of $\frac{17}{9}$. Find the original fraction.

8. The numerator and denominator of a fraction are in a ratio of 1 : 2. If the numerator is increased by four and the denominator is decreased by one, a new fraction is formed with a resulting value of 2. Find the original fraction.