LESSON 6-1

Products and Sums of Reciprocals

1. Read Statement 1. Then find each reciprocal or product to help you decide whether the statement is true or false.

Statement 1 The product of the reciprocals of two positive numbers is equal to the reciprocal of their product.

a. The reciprocal of 4 is _____.
   b. The reciprocal of 6 is _____.

c. The product of the reciprocals from 1a and 1b is _____.

d. The product of 4 and 6 is _____.

e. The reciprocal of the product of 4 and 6 is _____.

f. Repeat Problems 1a–1e using a different pair of positive numbers.

Do you think Statement 1 is true or false for all positive numbers? Explain.

2. Read Statement 2. Then find each reciprocal or sum to help you decide whether the statement is true or false.

Statement 2 The sum of the reciprocals of two positive numbers is equal to the reciprocal of their sum.

a. The reciprocal of 5 is _____.
   b. The reciprocal of 10 is _____.

c. The sum of the reciprocals from 2a and 2b is _____.

d. The sum of 5 and 10 is _____.

e. The reciprocal of the sum of 5 and 10 is _____

f. Repeat Problems 2a–2e using a different pair of positive numbers.

Do you think Statement 2 is true or false for all numbers having reciprocals? Explain.