

Example 3: For each statement below, do the following:

1. Write an equation (be sure to define any variables used).
2. Solve the equation, and answer the question.

a) One positive number is twice another positive number. The sum of the two numbers is 390. Find the two numbers.

b) Joe Pearlman received a 3.5% pay decrease. His salary after the decrease was \$27,985. What was his salary before the decrease?

c) Investment returns Jackie invests \$25,000 part at 5.5% annual interest and the balance at 8.3% annual interest. How much is invested at each rate if Jackie receives a 1-year interest payment of \$1571?

d) The chemistry lab at the University of Hardwoods keeps two acid solutions on hand. One is 20% acid and the other is 35% acid. How much 20% solution and how much 35% acid solution should be used to prepare 25 liters of a 26% acid solution?