

### Problem Solving - Section 2.5

1. Annie and Jim collect stamps! Annie has 3 times as many stamps as Jim. Combined, they have 420 stamps. How many stamps does each of them have?
2. A piece of pipe is 50 inches long. It is cut into 3 pieces. The longest piece is 10 inches more than the middle-sized piece, and the shortest piece measures 5 inches less than the middle-sized piece. Find the lengths of the 3 pieces.
3. Suppose you have a triangle for which side one has length 8 feet, and side two is 3 feet shorter than side three. If the perimeter of a triangle is 35 feet, what are the lengths of side two and three?
4. Renting a moving truck will cost \$30 per day and \$0.20 per mile. If you would like to rent the truck for 2 days and you have \$150 to spend on the rental, how many miles can you drive the moving truck?
5. The balance in an investment account grew by 10% in one year. If the balance at the end of that year was \$1320, what was the balance at the beginning of the year?
6. You want to sell your car in an auction. The auctioneer will get 8% of the selling price. What would the selling price have to be so that you can get \$11,500 after the auctioneer gets their portion?
7. Find the measure of the angle  $x$  in the isosceles triangle below:

