Lesson 10.5
Some more word problems.

1. The length of a rectangle is 3 feet more than twice its width. If the perimeter of the rectangle is 60 feet find its dimensions.

2. How many liters of salt water with 30% concentration of salt do we need to mix with 10 liters of salt water with concentration 10% in order to get salt water with 20% concentration?

3. John wants to invest $10000 in two different plans. Plan A has an annual interest rate of 5% and plan B has an interest rate of 3%. How much should he invest on each plan if he wants at the end of the year to gain interest of $440?

4. Tickets for a basketball game were $5 for students and $10 for non students. The total sales were $3750 and 50 more student tickets were sold. How many of each type of tickets were sold?

5. A jet flew east a distance of $1,800$ with the wind in 3 hours. Returning west, against the wind the jet took 4 hours. Find the jet's speed in still air and the speed of the wind.

6. At 3:30 pm two buses leave a town heading in opposite directions. One bus travels 50 mph and the other 60 mph, what time is it when they are 330 miles apart?

7. Towns $A$ and $B$ are 460 miles apart. At 12:00 pm a bus leaves town $A$ heading toward town $B$ at 60 mph and an other bus leaves town $B$ heading towards town $A$ at 55 mph. What time will they meet?