Math 1010 February 4, 2019 Homework 7
Read section 2.3 of your text.

For the following word problems, come up with an equation which expresses the unknown needed in terms of information provided, then solve the equation.

1) A number is 5 less than another number. If their sum is 11, find the two numbers.

2) A resort guarantees that the average temperature over the period Friday, Saturday, and Sunday will be exactly 80^oF , or else the guest pays only half price. If the temperature was 90 on Friday and 82 on Saturday, what must the temperature be on Sunday so that the resort does not lose half its revenue?

3) A 12 meter steel beam will be cut into two pieces so that one piece is 4m longer than the other. How long will each piece be?

4) A vending machine contains $3.00 in nickels and dimes. If the number of dimes is 5 more than twice the number of nickels, how many coins of each type are there?

5) A movie theater charges $7.50 per adult and $5 per child. If 700 tickets are sold and the total revenue is $4500, how many tickets of each type were sold?

6) An investor invested $10,000, part in a CD paying 8.5% APR, and the rest in a mutual fund paying 7% APR. The annual income from the CD is $200 more than the annual income from the mutual fund. How much was invested in each?

7) How many pounds of raisins at $3/lb must be mixed with 10 lb of peanuts worth 2.40/lb to produce a mixture worth $2.75/lb ?

8) How many ounces of Ceylon tea worth $1.50/oz and how many ounces of Formosa tea worth $2.00/oz must be mixed to produce a mixture of 8 oz worth $1.62/oz ?