Simultaneous Equation Word Problems
Worksheet # 129 Math 098

<u>Using 2 Variables, Solve the Following:</u>

1. The sum of two numbers is 37 and their difference is 13. What are the numbers?

2. In a class of 33 students there are 3 more boys than girls. How many boys and girls are in the class?

> Let x= boys
> y= girls

3. We want to cut a 275 foot cable into two pieces in such a way that one piece is 60 feet longer than the other. How long should each piece be?

4. Joe has $5.30 in dimes and quarters. If he has 32 coins, how many of each does he have?

> Let x= dimes
> y= quarters

5. $5,000 is invested in two banks, one giving 5% and one giving 8% per year. If the income (interest) from the investments is $304, how much is invested at each rate?

> Let x= amount at 5%
> y= amount at 8%

6. We want 100 gallons of milk with 4% fat. We mix 61% fat cream with 1% fat milk. How much of each should be used?

> Let x= gallons cream
> y= gallons skim milk

Worksheet # 129 Math 098
ANSWERS

1. 12 and 25

2. $x = 18$ boys
   $y = 15$ girls

3. 107.5 and 167.5

4. $x = 18$ dimes
   $y = 14$ quarters

5. $x = \$3200$
   $y = \$1800$

6. $x = 5$ gal cream
   $y = 95$ gal milk