MATH 125 - Word Problems Worksheet
Solve each of the following word problems. As discussed in class, you must
- show what your variable represents,
- set up and solve an algebraic equation (or inequality), and
- be sure to answer the question which is asked.

(1)   Answer the following questions concerning this word problem:
Sergio rides his bike from school to the beach at a speed of 16 mph and returns over the same road at 12 mph. The round trip takes 7 hours. How long and how far from the school is the beach?

Given the following table, with t representing the time from school to the beach,

	R	T	D
To the Beach	16	t	16t
Back to school			

(a) What, according to the table, does "16t" represent? _____

(b) Fill in the rest of the table.

(c) What relationship can you find about distance (to the beach verses the distance back to the school), in WORDS? (This is unlike any we have done so far...think .)

(d) Using the above, set up an equation and solve. Then answer the questions asked.

(2) A piggy bank contains dimes and quarters only.   There are twice as many dimes as quarters. If there is $3.60 in the bank, how many quarters are there? How many dimes?.

(3) The perimeter of a rectangle is 32 feet. If the length is one more than twice the width, find the dimensions of the rectangle.

(4) Before you start trying to solve this problem, think. Take a guess as to how much of each solution you think you might need. Would you expect to need more of the 10% or 6%?

How many liters of a 6% acid solution must be added to a 10% acid solution to make 12 gallons of a acid solution that is 9% acid?

(5) Find three consecutive EVEN integers such that three times the middle integer is six more than the sum of the first and third integers.

---

(6) Todd invested some money from which he earns a total annual income of $34. He invested a certain amount money in an account paying 5% interest rate and twice that amount in bonds paying 6% per year. How much did he invest at each rate?

---

(7) Two cars leave at the same time and travel in the same direction. The faster car travels 60 mph, the slower one travels 45 mph. How long will it take until they are 30 miles apart?

---

(8) If 3 is added to a number and this sum is doubled, the result is 2 more than the number. Find the number.