Word Problems

1. Define your variable

2. Set up the equation

3. Solve the equation

4. Check your solution

5. Answer what is asked

1. A mixture of nuts that weighs 8 pounds cost $10.50 per pound. If one type of nut costs $4 per pound the other costs $12 per pound.   How much of each type was used in the mixture?

	Amount	Cost per pound	Total Cost
Type 1			
Type 2			
Mixture			

2. Walt made an extra $9000 last year from a part-time job. He invested part of the money at 9% and the rest at 8%. He made a total of $770 in interest. How much was invested at 8%?

	Percent	Amount	Value
Amount at 9%			
Amount at 8%			
Total			

3. Ziggy's Famous Yogurt blends regular yogurt that is 3% fat with its no-fat yogurt to obtain low fat yogurt that is 1% fat. How many pounds of no-fat yogurt should be mixed to obtain 60 pounds of low fat yogurt?

	Percent	Amount	Quantity
Nonfat yogurt			
Regular yogurt			
Lowfat yogurt			

4. In a chemistry class, 12L of a 12% alcohol solution must be mixed with a 20% solution to get a 14% solution. How many liters of the 20% solution are needed?

	Percent	Amount	Quantity
12% sol			
20% sol			
14% sol			

5. A car travels 60 mph for the first part of a trip and then 80 mph for the remainder of trip which was twice as long as the first part of the trip. If the person drove a total of 330 miles, how much time was spent on each part of the trip?

	Rate	Time	Distance
First part			
Second part			

6. A boat traveled across a lake and back. The trip across took 7 hours. The trip back took 10 hours. The speed of the boat for the first part was 3 mph faster than the speed of the boat for the second part. What was the rate o each part?

	Rate	Time	Distance
Downstream			
Upstream			