Applications: Mixture Problems

A. How many liters of 10% alcohol solution should be mixed with 12 liters of 20% alcohol solution to obtain a 14% alcohol solution?

	Concentration of alcohol	Number of liters	Number of liters of alcohol in solution
10% solution			
20% solution			
Final solution			

Equation:

B. Cashews sell for $1.20 per pound bag and Brazil nuts sell for $1.50 per pound bag. How many pounds of cashews should be mixed with 20 pounds of Brazil nuts to get a mixture that sells for $1.30 per pound?

C. How many gallons of 5% milk (meaning 5% butterfat) and how many gallons of 1% milk must be mixed together to obtain 120 gallons of 2% milk?

	Concentration of fat	Number of gallons	Number of gallons of fat in milk
5% milk		x	
1% milk			
Final solution			

Equation: