

Chapter 7.7

Mixture Problems Homework, Part 2

For each problem, make a chart like the one shown below. Solve for the two unknown values.

	Number	Value	Total
1 st thing	x		
2 nd thing	y		
Total			

Calculate the concentration for the mixture

1. Cashews sell for \$7.50 per pound and peanuts sell for \$3.20 per pound. How many pounds of each type of nut must be mixed to make 20 pounds of nuts with a value of \$4.92?
2. Cheap leftover Halloween candy sells for \$1.20 per pound. Delicious Christmas candy sells for \$11 per pound. A store wants to create a 120-pounds mixture that sells for \$4.63 per pound. How many pounds of each candy should they use?
3. A 25% silver alloy is to be melted with a 55% silver alloy. How many grams of each must be used to obtain 60 grams of a 32% silver alloy?
4. A 10% salt solution is mixed with a 50% salt solution to make 600 ml of a 25% salt solution. How many milliliters of the 10% and 50% are needed?
5. A soil analysis determines that you need to use 80 pounds of fertilizer that contains 20% nitrogen. The store only sells fertilizer with 15% nitrogen or 35% nitrogen. How many pounds of each would you have to mix to get 80 pounds of 20% nitrogen?