

## **Mixture Problems**

1. How many cubic centimeters of water should be added to 480 cubic centimeters of a 2% saline solution so as to decrease the salt concentration to 1.5%?
2. How many liters of 75% acid solution must be mixed with 15 liters of 45% acid solution to produce 70% acid solution?
3. How many liters of 60% and 80% acid solution must be mixed together to get 12 liters of 75% acid solution?
4. A disinfectant contains 15% alcohol. How many liters of pure alcohol must be added to 48 liters of the disinfectant to obtain a new solution that is 32% alcohol?
5. How much pure salt must be added to 200 grams of a 5% salt solution to triple its strength?
6. How many liters of 50% acid solution must be mixed with 2000 liters of 3% acid solution to produce 15% acid solution?

### **Solutions.**

1.  $160 \text{ cm}^3$
2. 75 liters
3. 9 liters of 80% solution and 3 liters of 60% solution
4. 12 liters
5. 23.53 grams
6. 685.71 liters