Solutions

Independent Practice

4. You mix 700 mL of a 4 M with 500 mL of pure water. What is the new concentration?

2.35 M

5. You mix 1450 mL of a 2.5 M solution & 100 mL of pure water. What is the new concentration?

2.34 M

6. You mix 500 mL of a 4 M solution is diluted with 100 mL of pure water. What is the new concentration?

3.33M

7. You mix 850 mL of a 2.5 M solution is diluted with 400 mL of pure water. What is the new concentration?

1.7M

8. A student has 345mL of a 1.5M NaCl solution. If the student boils the solution until the volume of the solution is 250mL, what will the molarity of the solution be?

2.07 M

9. How much water is needed to add to 500mL of a 2.4M KCl solution to make a 1.0M solution?

700mL added

10. How many milliliters of a stock solution of 1.00M NaOH would you need to prepare 500.0mL of 0.250M NaOH?

125mL needed

Tro, Nivaldo. *Chemistry: A Molecular Approach*. 3rd ed. New York City: Pearson, 2014. Print.