Chemistry 115 Name

Dr. Cary Willard

Quiz 8a (20 points) May 14, 2014

1. (8 points) Define the term viscosity.

Which would be expected to have a higher viscosity, butane (C4H10) or dodecane (C12H26) and why?.

1. (8 points) A solution is made by mixing 35.2 g of sodium nitrate (NaNO3) with 492 g of water to make 500. mL of solution.
   1. What is the mass percent of sodium nitrate in the solution?
   2. What is the molarity of sodium nitrate in the solution?
2. (4 points) How many milliliters of a 4.25 M solution of acetic acid are required to prepare 750. mL of a 0.634 M solution of acetic acid?

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Quiz 8b (20 points) May 14, 2014

1. (8 points) Define the term viscosity.

Which would be expected to have a higher viscosity, ethyl alcohol () or dimethyl ether () and why?.

1. (8 points) A solution is made by mixing 83.4 g of sodium nitrate (NaNO3) with 418 g of water to make 500. mL of solution.
   1. What is the mass percent of sodium nitrate in the solution?
   2. What is the molarity of sodium nitrate in the solution?
2. (4 points) How many milliliters of a 4.25 M solution of acetic acid are required to prepare 750. mL of a 0.499 M solution of acetic acid?