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Math 1020

Final Project

Suppose 25.6% and 5.7% solutions are available. Our goal is to make 1 L of a 8.3% solution and verify the strength is correct.

- 1) Interpret the percent strength 25.6%. **Answer:** 25.6g/100mL
- 2) Interpret the percent strength 5.7%. **Answer:** 5.7g/100mL
- 3) Interpret the percent strength 8.3%. **Answer:** 8.3g/100mL
- 4) Describe how you mix the 25.6% and 5.7% solutions to get 1 L of a 8.3% solution. Round to the nearest natural number in mL.
Answer: 131mL 25.6%+869mL 5.7%
- 5) How many mL of the 25.6% solution do we use? **Answer:** 131mL
- 6) How many grams of pure drug are there in the above volume? Round to the nearest tenth. **Answer:** 33.5g
- 7) How many mL of the 5.7% solution do you use? **Answer:**869mL
- 8) How many grams of pure drug are there in the above volume? Round to the nearest tenth. **Answer:** 49.5g
- 9) Find the sum of the number of grams of pure drug from the 25.6% and 5.7% solutions. **Answer:** 33.5g+49.5g=83.0g
- 10)How many grams of pure drug are there in 1 L of the 8.3% solution?
Answer: 83.0g