

Hello Advisors,

I am the chair for the SkillsUSA medical math competition. I will be following the national guidelines for the test including the medical abbreviations and conversion chart. Students should study both the abbreviations and conversions as they will not be allowed to use those documents during the test.

The test will be 50 written questions, most in the form of a word problem. The students will have 2 hours to take the test but unlike the national rules, students will be able to leave the room when they are done but not able to return after that.

The test will cover all 8 areas noted on the national scope. The questions will be fairly evenly distributed. Students will only need to bring two #2 pencils and a NON graphing calculator. Electronic devices of any kind will not be allowed into the testing area.

Practical Problems in Mathematics for Health Occupations 2nd edition by Louise Simmers will be used as a resource text. Below are some sample questions. Good luck to all!!



1. A nursing assistant in a newborn nursery weighs a set of quadruplets when they are born. The infants weigh $3\frac{1}{4}$ lb, $2\frac{5}{8}$ lb, $2\frac{1}{2}$ lb and $3\frac{3}{8}$ lb. What is the total weight of all four infants?
2. A study showed the chicken pox vaccine can save \$5 for every \$1 in cost. If 26,400 children are immunized at the cost of \$35 per child, how much money would be saved?
3. A physician orders aminophylline 7.5 mg per kg of body weight. The patient weighs 110 lb. What dosage of aminophylline should the patient receive?
4. Convert the Roman numeral LXXXVI to the correct Arabic number.
5. A patient's intake and output (I&O) sheet contains the following entries: for *intake*; 8 oz of orange juice, 400cc soup and absorbed 150 cc from the intravenous fluids. for *output*; vomited 200 cc and urinated 10 oz. Which is greater; intake or output AND by how many ccs?
6. How many ml of a 90% ethyl alcohol solution are needed to prepare 150 ml of a 70% ethyl alcohol solution?
7. The property tax on a medical center is one mill or $\frac{1}{10}$ of one cent (\$0.001) for every \$1.00 of appraised value. If the medical center has an appraised value of \$235,654.00, what is the tax due for one mill?