

UNIT BASED CALCULATION

Drugs like insulin, heparin are available in form of units to administer such medication nurse must be aware of how to calculate unit based drug calculation. The following are the steps involved in unit dose calculation.

Steps:

Determine the amount of medication per ml

Determine the infusion rate or ml/hour

Unit based calculation

- 1) The consultant has ordered continuous heparin sodium by IV at 1000 units per hour. IV D5W 500ml with 20,000 units of heparin. How many ml/hr?

Sol: Step 1: $\frac{20,000 \text{ units}}{500\text{ml}} = 40 \text{ units/ ml}$

Step 2:

$$= \frac{1000 \text{ ml}}{40 \text{ units}}$$

Ans = 25 ml/hr

References:

1. Potter and Perry's Fundamentals of nursing South Asia Second edition: Elsevier; July 2017
2. Carol Taylor, Pamela Lynn Jennifer L. Bartlett Fundamentals of nursing south Asian edition; Volume 1: Wolters Kluwer 2020
3. Padmaja Udaykumar Pharmacology for nurses Fifth edition: Jaypee; 2022
4. GL Chattri Nursing Drug Dosage and their calculations First edition Jaypee: 2017
5. Sheila J. Ogden, Linda K. Fluharty Calculation of drug dosages A workbook text; 11th edition; Elsevier; 2019
6. Muthuvenkatachalam S, Ambili M Venugopal Target High sixth edition; CBS Publisher; Jan 2021
7. Matt Vera BSN RN. Nursing pharmacology practice questions & test bank for NCLEX (500+ questions) [Internet]. Nurseslabs. 2021 [cited 2023 Feb 6]. Available from: <https://nurseslabs.com/nursing-pharmacology-nclex-practice-questions-test-bank/>