



Tutorial: Dosage Calculation and Safe Medication Administration 3.0

Module: Critical Care Medications

**Critical Care Medications: Overview**

Intravenous fluid infusions

Calculating flow rates for large-volume IV bolus

Activity 1

Continuous IV medication infusions

Calculating continuous IV medication infusions

Activity 2

Titrating continuous IV medication infusions

Calculating titrated continuous IV infusions

Case studies

Close

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$$X \text{ mL/hr} =$$

Step 2

Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL/hr} = \frac{500 \text{ mL}}{25,000 \text{ units}}$$

Step 3

Place any remaining ratios that are relevant to the item on the right side of the equation along with any needed conversion factors to cancel out unwanted units of measure.

$$X \text{ mL/hr} = \frac{500 \text{ mL}}{25,000 \text{ units}} \times \frac{18 \text{ units}}{1 \text{ kg}} \times \frac{1 \text{ kg}}{2.2 \text{ lb}} \times \frac{174 \text{ lb}}{1 \text{ hr}}$$

Step 4

Solve for X