

# Dosage Calculation Sheet

Bonus · the formulas + worked examples.

NCLEX  
BOOTCAMP

## Core formulas

**Tablets/mL:**  $(\text{Desired} \div \text{Have}) \times \text{Quantity}$

**IV mL/hr:**  $\text{Total volume} \div \text{Total hours}$

**IV gtt/min:**  $(\text{Volume} \times \text{Drop factor}) \div \text{Time (min)}$

**Weight-based:**  $\text{Dose} \times \text{Weight (kg)}$

**Safe range:**  $\text{mg/kg/day} \times \text{kg}$ , compare to ordered

## Conversions to memorize

1 kg	2.2 lb
1 g	1000 mg
1 mg	1000 mcg
1 L	1000 mL
1 tsp	5 mL
1 tbsp	15 mL
1 oz	30 mL
gr 1 (grain)	≈ 60 mg

## Worked examples

1. Order 500 mg; have 250 mg tabs.

$$(500 \div 250) \times 1 = 2 \text{ tablets}$$

2. Infuse 1000 mL over 8 hr.

$$1000 \div 8 = 125 \text{ mL/hr}$$

3. 1000 mL over 8 hr, drop factor 15.

$$(1000 \times 15) \div 480 = \approx 31 \text{ gtt/min}$$

4. Heparin 25,000 units in 250 mL; order 1000 units/hr.

$$100 \text{ units/mL} \rightarrow 10 \text{ mL/hr}$$

5. Child 44 lb; dose 5 mg/kg.

$$44 \div 2.2 = 20 \text{ kg} \times 5 = 100 \text{ mg}$$

## Test-day tips

**Label your units** and cancel them — if units don't cancel, the setup is wrong.

**Round per the rule** in the stem (nearest whole, tenth, etc.).

**Sanity-check:** does the answer make clinical sense?

**This is one bonus sheet** from the 51-page **NCLEX Bootcamp** white paper. Get the whole method for \$9, or free when you book a 1:1 session.