

Dosage calculation and safe medication administration 3.0: AIDS

3/2/24



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Calculator

Case studies

A nurse is converting a client's weight from pounds to kilograms. What is the client's weight in kilograms?
(Review the MAR. Round the answer to the nearest tenth.)

49.1

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.)
 $X \text{ kg} =$

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.)
 $X \text{ kg} = \frac{1 \text{ kg}}{2.2 \text{ lb}}$

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.
 $X \text{ kg} = \frac{1 \text{ kg}}{2.2 \text{ lb}} \times \frac{108 \text{ lb}}{1}$

Step 4
Solve for X.
 $X \text{ kg} = 49.090909 \text{ kg}$



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Calculator

Case studies

A nurse is calculating the dosage of atazanavir. How many capsules should the nurse administer?
(Review the MAR and medication label. Move the number of capsules the nurse should administer into the medication cup. Then click "Submit.")



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Case studies

A nurse is calculating the dosage of ritonavir. How many milliliters should the nurse administer?
(Review the MAR and medication label. Round the answer to the nearest tenth.)



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.)
 $X \text{ mL} =$

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.)

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Case studies

A nurse is calculating the dosage of abacavir. How many milliliters should the nurse administer?



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.)
 $X \text{ mL} =$

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.)
 $X \text{ mL} = \frac{1 \text{ mL}}{20 \text{ mg}}$

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



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Calculator

Case studies

A nurse is calculating the dosage of emtricitabine. How many milliliters should the nurse administer?



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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.)

$X \text{ mL} =$

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.)

$$X \text{ mL} = \frac{1 \text{ mL}}{10 \text{ mg}}$$

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.

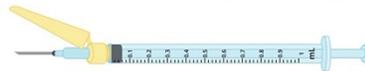


Calculator

Case studies

A nurse is calculating the dosage of enfuvirtide. How many milliliters should the nurse administer?

(Review the MAR and medication label. Measure the correct dose of the medication by dragging the syringe. Then click "Submit.")



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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.)

$X \text{ mL} =$

Step 2

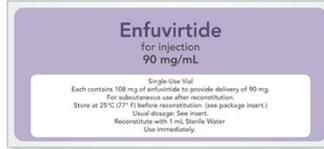
Find the ratio in the item that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)

Calculator

Case studies

A nurse is reading enfuvirtide label. Which of the following is accurate information from this label?

(Select all that apply.)



- A Mix with 0.9% NaCl.
- B Use immediately.
- C Dilute with 2 mL fluid.
- D Final dilution is 90 mg/mL.
- E Store at 25° C (77° F) before mixing.
- F Use for subcutaneous injection.

The nurse should use sterile water for injection as the diluent for this medication. The nurse should use this medication immediately after reconstitution. The nurse should dilute this medication with 1 mL fluid. The final dilution of this medication is 90 mg/mL. The nurse should ensure that this medication is stored at 25° C (77° F) before mixing. This medication is for subcutaneous injection use only.