

Question Collection: Calculations

16 Questions

1. A nurse is to administer 150 mg of a drug intramuscularly. The label on the multidose vials reads 100 mg/mL. How much would the nurse give?

- a. 1.5 mL
- b. 1 mL
- c. 2 mL
- d. 2.5 mL

2. The health care provider prescribes 250 mg of a drug. The information on the drug vial says the concentration is 500 mg/mL. How much of the drug should the nurse prepare?

- a. 0.25 mL
- b. 0.33 mL
- c. 0.5 mL
- d. 0.75 mL

3. A nurse is to administer 30 mg of furosemide (Lasix) to a client with congestive heart failure (CHF). The vial contains 40 mg/mL. Which is the correct dose to administer?

- a. 0.25 mL
- b. 0.50 mL
- c. 0.75 mL
- d. 1.0 mL

4. The nurse is to infuse 1,000 mL over the next 8 hours. Calculate the mL/hour that the nurse should set the infusion pump.

- a. 100 mL
- b. 125 mL
- c. 150 mL
- d. 175 mL

5. A postmenopausal client has been prescribed Ibandronate (Boniva) 3 mg intravenously every 3 months. Boniva is available 1 mg/mL. How many mL should the nurse administer?

6.

A nurse is to administer 500 mg of a drug intramuscularly. The label on the multidose vial reads 250 mg/mL. How much of the medication would the nurse prepare in the syringe?

- a. 0.5 mL
- b. 1 mL
- c. 1.5 mL
- d. 2 mL

7. The client is ordered Didrex 25 mg PO BID. The drug comes from the pharmacy to the floor in 50-mg tablets. How much should the nurse administer to the client per dose?

- a. 1 tablet
- b. 1/2 tablet
- c. 2 tablets
- d. 3/4 tablet

8.

The client returns from the PACU with the following order: morphine 3 mg IV every 2 hours as needed for relief of pain. The vial reads morphine, 4 mg/mL. How many milliliters of morphine should the client receive?

- a. 1
- b. $\frac{3}{4}$
- c. $\frac{1}{2}$
- d. $\frac{1}{4}$

9.

A client is receiving a maintenance dose of aminophylline, 3 mg/kg PO q 6 hr. The client weighs 50 kg. How many mg should the client receive in a 24-hour period?

- a. 200 mg
- b. 400 mg
- c. 600 mg
- d. 800 mg

10.

A newly admitted client has orders to receive 1000 mL of normal saline IV over 8 hours. If the IV infusion set is a microdrip set that delivers 60 drops per mL, how many drops per minute should the client be receiving?

- a. 60
- b. 125
- c. 240
- d. 480

11.

The nurse is to infuse 100 mL of 5% dextrose and water solution containing an IV antibiotic over 30 minutes. The infusion set delivers 10 gtt/mL. How many drops per minute will the nurse administer? Round to the nearest whole number.

- a. 33 gtt/min
- b. 30.3 gtt/min
- c. 30 gtt/min
- d. 3 gtt/min

12.

The physician writes an order for oxazepam for a 6-year-old child. The nurse verifies that there is no established dosage for children 6 to 12 years of age for oxazepam. The nurse knows that the usual adult dose is 10 mg t.i.d. What would the nurse calculate the appropriate dose to be?

- a. 0.03 mg t.i.d
- b. 0.3 mg t.i.d.
- c. 1.8 mg t.i.d
- d. 3.3 mg t.i.d

13.

A health care provider orders 500 mL D₅W to be administered over 4 hours along with 80 mg gentamicin in 50 cc normal saline to be administered over 30 minutes. How many mL of fluid will the client receive in one hour (60 minutes)?

- a. 175 mL
- b. 150 mL
- c. 125 mL
- d. 100 mL

14.

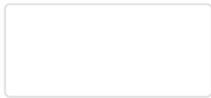
An antineoplastic medication is prescribed for a child. The nurse is verifying the dose is the recommended dose for a child with a certain body surface area (BSA). The child's BSA is 0.43 m². The average adult BSA is 1.7 m², and the usual adult dose of this medication is 40 mg. What is the recommended child's dose? (Round to the nearest whole number.)

15.

A client has orders to receive 2 L of IV fluid over a 24-hour period with ½ this amount to be infused in the first 10 hours of treatment. How many milliliters per hour will the nurse administer during the first 10 hours of the infusion? Round to the nearest whole number.

16.

A client with an acute myocardial infarction is admitted to the coronary care unit. The physician has ordered heparin 25,000 units in 250 mL normal saline to infuse at a rate of 600 units/h. The nurse sets the infusion pump to deliver how many milliliters in an hour? Record the answer as a whole number.



Answer Key

- 1 A
- 2 C
- 3 C
- 4 B
- 5 3
- 6 D
- 7 B
- 8 B
- 9 C
- 10 B
- 11 A
- 12 D
- 13 A
- 14 10
- 15 100
- 16 6