

14. Insulin can be administered by what other routes?

- a. Subcutaneous, intravenous, self-administered pens
- b. Intramuscular, inhalation, intradermal
- c. Subcutaneous, intradermal, sublingual

15. One balanced electrolyte solution is which of the following?

- a. D5NS
- b. LR
- c. 0.9% NSS
- d. 0.45% NSS

16. Identify which of the following solutions is the weakest?

- a. 1:1000
- b. 1:10,000
- c. 1:5

17. There are two bottles of milk of magnesium on the shelf at the pharmacy. One bottle contains 9.5 oz and the other 300 mL. Which has the larger volume?

a. $9.5 \text{ oz} \times 30 = 285 \text{ mL}$ 300 mL bottle

18. The recommended dose of Dilantin for a child is 3 mg/kg/24 hr given every 12 hours. The patient's weight is 10 lbs. The medication is supplied in 250 mg/10 mL.

a. Calculate the weight for the child in kg $10 \div 2.2 = 4.54 = \boxed{4.5 \text{ kg}}$

b. Calculate the safe dose for the child in mg/dose $\frac{3 \text{ mg/kg}}{\text{day}} \times 4.5 \text{ kg} = 13.5 \text{ mg/day} \div 2 \text{ doses} = \boxed{6.75 \text{ mg}}$

c. How many milliliters will be administered for each dose? $\frac{6.75 \text{ mg}}{250 \text{ mg}} \times 10 \text{ mL} = 0.27 \text{ mL} = \boxed{0.3 \text{ mL}}$

19. The patient is ordered Tylenol elixir at 325 mg per 2 teaspoons (tsp.) How many mL would the nurse administer? $1 \text{ tsp} = 5 \text{ mL}$

a. $2 \text{ tsp} = \boxed{10 \text{ mL}}$

20. An IV medication of 250 mL is started at 0750 to run at 33 gtts/min using a 10 gtts/mL set. How long will the infusion run?

a. $\frac{250 \text{ mL}}{1 \text{ mL}} \times \frac{10 \text{ gtts}}{33 \text{ gtts}} = 75.75 = 76 \text{ min} = \boxed{1 \text{ hr}, 16 \text{ min}}$