

Pediatric Med Math Practice Quiz #2

Show your calculations

1. A 5-year-old child weighing 20 kg has an order for Acetaminophen liquid 80mg PO PRN every 4 hours for a temperature >101 . The child's temperature is 101.3. On hand is Acetaminophen liquid 160mg/5ml.

How much volume of Acetaminophen liquid can be given every 4 hours to this child?

2. A child weighs 30kg. The safe daily drug dosage is 4mg/kg/day. Calculate the total daily dosage for this child.

- a. 12mg/day
- b. 120mg/day
- c. 160mg/day
- d. .12 g/day

3. A 1-year old infant weighing 8 kg has an order for Augmentin 125mg PO q 8hours. The safe dose range is 20-40 mg/kg/24hours to be given q8 hours.

- a. Calculate the safe dose range for this child.

- b. What will be the total dose given in 24 hours?

- c. Is the dose ordered a safe dose for this child?

4. A 3-year-old child weighing 13 kg is ordered Theophylline 65 mg Q 6 hours via his G-tube. The safe dose range is 22mg/kg/24 hours to be given Q 6 hours. The bottle is labeled 80mg/15 mL.

- a. Calculate the safe dose range for this child.

- b. Is the dose ordered a safe dose for this child?

- c. How much of the solution should the nurse draw up to be given for each dose?

5. A 17-year-old weighing 140 pounds has an order for Norco 5/325 (hydrocodone 5mg and 325mg acetaminophen) 1 tablet PO every 4 hours PRN as needed for pain.

If he takes the dose every 4 hours as prescribed, what is the total amount of Acetaminophen he will take in a 24-hour period?

6. The nurse is preparing to administer Cefotaxime 800mg IV every 6 hours to a 5-year-old who weighs 15kg. The safe dose range is 50 to 200mg/kg/24 hours given every 6 hours.

For IV use, the nurse must dilute this dose with sterile water at a concentration of 50mg/mL sterile water. This will be given IV piggyback over 30 minutes.

a. Calculate the safe dose range for this child.

b. Is the dose ordered a safe dose for this child?

c. How much solution of sterile water must the 800 mg be diluted into prior to administering it IV piggyback.

7. Calculate the daily fluid volume for a 32kg child.

8. Calculate the daily fluid volume for a 16kg child.

9. Calculate the BSA for a child who weighs 11.3 kg and is 75 cm.

10. A child is ordered an infusion of cytarabine 200 mg/m² in 0.9% NaCl to infuse over 24 hours. If the child weighs 22.7 kg and is 120 cm.

a. Calculate the BSA for this child.

b. How many mg of cytarabine would you add to the 9% NaCl?