Practice Problems – Pediatric Medication Computation

Show your work for all questions

1. A 4-year old child is ordered an insulin drip of 100ml normal saline with 300 units of regular insulin to run at 6 units an hour. What will you set the IV pump at?

2. A 4-year-old patient who weighs 32 lbs is admitted with pneumonia and a history of gastric reflux disease, and has the following orders:
   500ml D/NS with 0.6mEq of Potassium Chloride per kg per hour. Infuse IVF at 60ml/hour
   Famotidine 6mg IV q 12 hours
   Gentamycin 30mg IVB q 8 hours

   a. How much Potassium Chloride should be added to the IV bag?

   b. Famotidine comes in a vial with 10 mg/2ml. How much medication will you draw up to give the ordered dose?

   c. Using your drug book, is this a safe dose of Famotidine for this child?

   d. Using your drug book, is this a safe dose of Gentamycin? If not, what would you do?

3. Liquid Tylenol 150mg is ordered every 4 hours prn for a 12kg child. The label on the bottle indicates that the concentration is 80mg/2 ½ ml.
   a. Is this a safe dosage?

   b. How much would you give? Round to the nearest tenth.

4. A newborn weighs 2.8kg and is ordered Lanoxin 0.035mg/kg/24 hours divided in 4 equal doses. Lanoxin comes 50mcg/ml. How much would you give for the 1000 dose?

5. A one-month old weighs 9lbs 12oz.
    a. Calculate his 24-hour fluid needs

    b. What would be the correct IV rate per hour for this infant?

6. A newborn weighs 8lbs. 5oz. and is being bottle-fed every 4 hours.
    a. What is the infant's EWL?

    b. What are the caloric needs for this infant per feeding? Express answer in both calories and number of ounces.