Practice Problems – Pediatric Medication Computation

Show your work for all questions.
This is not collected or graded.

1. 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?

2. 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.

3. A newborn weighing 2.8kg 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?

4. 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?

5. 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.

6. Determine this newborn's estimated weight loss (how much can baby lose and what is the lowest they can get in lbs and oz?), nutritional needs, fluid maintenance needs, and expected urinary output. Birth weight is 10 lb 2oz.