1. A nurse is preparing to administer furosemide (Lasix) 3 mg/kg/dose PO every 12 hour to an infant who weighs 15 lb. Available is furosemide oral solution 10 mg/ml. How many mL should the nurse administer per dose? (Round the answer to the nearest whole number.)

15 lb = 6.8 kg

3 mg × 6.8 = 20.4 mg per dose

$$\frac{10 mg}{1 ml} = \frac{20.4 mg}{x ml}$$

10x = 20.4

x = 2 ml every 12 hr

2. A nurse is preparing to administer ranitidine (Zantac) 8 mg/kg/dose PO every 12 hr. to a child who weighs 46 lb. Available is ranitidine oral solution 15 mg/ml. How many mL should the nurse administer per dose? (Round the answer to the nearest whole number.)

46 lb = 20.9 kg

8 mg × 20.9 = 167.2 mg

$$\frac{15 mg}{1 ml} = \frac{167.2 mg}{x}$$

15x = 167.2

x = 11 mL q 12 h

3. A nurse is preparing to administer morphine 0.1mg/kg IV bolus to an infant who weighs 5 kg. Available is morphine 5 mg/ml injection. How many mL should the nurse administer? (Round the answer to the nearest tenth.)

0.1 mg/kg × 5 kg = 0.5 mg

$$\frac{5 mg}{1 ml} = \frac{0.5 ml}{x ml}$$

5x = 0.5

x = 0.1 ml

4. A nurse is preparing to administer dexamethasone (Decadron) 0.4 mg/kg/day PO divided in equal doses every 12 hour to a school-age child who weighs 47 lb. Available is dexamethasone oral solution 0.5 mg/5 ml. How many mL should the nurse administer per dose? (Round the answer to the nearest whole number.)

47 lbs = 21.4 kg

0.4 mg × 21.4 kg = 8.6 mg per day

$$\frac{0.5 mg}{5 ml} = \frac{8.6 mg}{x}$$

0.5x = 43

x = 86 ml per day or 43 ml Q12 hr

5. A nurse is preparing to administer 0.9% sodium chloride 300 ml to infuse over 45 min. The nurse should set the IV pump to deliver how many mL/hr.? Round answer to a whole number.

$$\frac{300 ml}{45 mm} = \frac{x ml}{60 min}$$

45x = 300 × 60   x = 400 ml/hr

6. Prescribed medication: 30 micrograms of digoxin IV q 12 hrs for a 10 kg child.
Concentration: Digoxin 0.25 mg/ml
How many milliliters should the nurse withdraw from the vial to administer one dose? Round answer to the ~~nearest tenth.~~ hundredth

0.25 mg = 250 mcg/1 ml

$$\frac{250 mcg}{1 ml} = \frac{30 mcg}{x}$$

250x = 30

x = 0.12 ml Q12 hr

7. The nurse will administer 50 ml IVPB by gravity over 1 hour using IV tubing with a drop factor of 15 gtt/mL. The nurse will administer how many drops per minute?

$$\frac{15 gtt}{1 ml} = \frac{x gtt}{50 ml}$$

1x = 15 × 50

x = 750 gtt are in 50 ml

$$\frac{750 gtt}{60 min} = 12.5 \text{ or } 13 gtt/min$$

8. The recommended range for a medication is 200 to 400 mg/kg/day. The patient weighs 8 kg. What is the safe dose range for this patient?

$$8kg \times 200 = 1600 \text{ mg/day}$$
$$8kg \times 400 = 3200 \text{ mg/day}$$

9. The pediatric dose for piperacillin sodium is 200 mg to 300 mg/kg/24 hours in equally divided doses every 4 to 6 hours. The patient weighs 30 kg. Which of the following is within the recommended range?

Q4 to Q6

$$30kg \times 200 = 6000 \text{ mg}/24 hrs = 1000 \text{ to } 1500 \text{ mg}$$
$$30kg \times 300 = 9000 \text{ mg}/24 hr = 1500 \text{ to } 2250 \text{ mg}$$

A. 2000 mg every 4 hours over
✓B. 1200 mg every 4 hours
✗C. 1450 mg every 6 hours under
✗D. 6000 mg every 6 hours over

so 1 amp is 1000 + = 15 mg every 24 ea

10. The nurse is verifying the recommended dose for a 25 kg child receiving a medication. The recommended dose: 0.2 to 0.5 mg/kg/24 hours in equally divided doses every 6 hours. What is the recommended dose range per day?   What is the safe dose range for doses given every 6 hours?

$$25kg \times 0.2 = 5 \text{ mg}/24 hr \qquad 25kg \times 0.5 = 12.5 \text{ mg}/24 hr$$

1.25 mg Q6 hr ←——→ 3.13 mg Q6 hr

11. The nurse is to administer 220 mg of acetaminophen elixir PO. How many milliliters should the nurse draw up in the PO syringe? Round to the nearest tenth.

NDC 0054-3010-50
ACETAMINOPHEN
(Cherry)
Oral Solution USP
160 mg per 5 mL
120 mL

$$\frac{160 \text{ mg}}{5 \text{ ml}} = \frac{220 \text{ mg}}{X \text{ ml}}$$
$$160X = 5 \times 220$$
$$160X = 1100$$
$$X = 6.9 \text{ ml}$$