

1. Recommended range: 10 mg – 40 mg/mL
 $350/25 = 14 \text{ mg/mL}$
 - a. Answer: yes
2. Med: Ranitidine 18 mg mixed in 10 mL NS
 $18/10 = 1.8 \text{ mg/mL}$
 - a. Answer: 1.8 mg/mL
3. Med: Piperacillin sodium 200 mg – 300 mg/kg/24 hrs.
Pt. weight = 30 kg
 $200 \times 30 = 6000 \text{ mg/24 hrs.}$
 $300 \times 30 = 9000 \text{ mg/24 hrs.}$
 $1200 \times 6 = 7200 \text{ mg/24 hrs.}$
 - a. Answer: 1,200 mg every 4 hrs.
4. Med: Ceftriaxone 1000 mg daily
Pt. weight 20 kg
 $50 \times 20 = 1000 \text{ mg/24 hrs.}$
 $75 \times 20 = 1500 \text{ mg/24 hrs.}$
 - a. Answer: Yes
5. Med: Ceftriaxone 700 mg BID
Pt. weight 20 kg
 $50 \times 20 = 1000 \text{ mg/24 hrs. (500 mg/12 hrs.)}$
 $75 \times 20 = 1500 \text{ mg/24 hrs. (750 mg/12 hrs.)}$
 - a. Answer: Yes
6. Med: Vancomycin 40 mg/kg/24 hrs.
Pt. weight 30 kg
 $40 \times 30 = 1200/24 \text{ hrs.}$
 $1200/4 = 300 \text{ mg every 6 hrs.}$
 $1200/3 = 400 \text{ mg every 8 hrs.}$
 $1200/2 = 600 \text{ mg every 12 hrs.}$
 - a. Answer: 400 mg every 8 hrs.
7. Med: 25 mL IVPB to be given over 30 minutes
 $(25 \text{ mL} \times 60 \text{ gtt/mL}) / 30 \text{ minutes} = 1500 / 30 = 50 \text{ mL}$
 - a. Answer: 50 mL/hr.
8. Med: 275 mg Amoxicillin every 12 hrs.
Concentration 250 mg/5 mL = 50 mg/mL
Recommended range: 260 mg – 292.5 mg every 12 hrs.
 $275/50 = 5.5 \text{ mL}$
 - a. Answer: 5.5 mL every 12 hrs.
9. Med: 1.1 g of Ceftriaxone IV every 12 hrs.
 $1.1\text{g} \times 2 = 2.2 \text{ g}$
 - a. Answer: Contact the provider regarding the dose exceeding the range
10. Concentration: 25.6 mg/mL ($640/25 = 25.6$)
Recommended dose = 40 mg/kg every 8 hrs.
 $(25 \text{ mL} \times 60)/15 = 100 \text{ mL/hr.}$
 $(25 \text{ mL} \times 60)/30 = 50 \text{ mL/hr.}$

- a. Answer: administer the med. At 50 mL/hr.
11. Med: Gentamycin sulfate 10 mg mixed in 50 mL NS every 8 hrs.
(50 mL X 60)/20 = 150 mL/hr.
(50 mL X 60)/30 = 100 mL/hr.
- a. Answer: 100 mL/hr.