

Practice Questions

1. Answer: yes
 $350 \text{ mg} / 25 \text{ mL} = 14 \text{ mg/mL}$
This falls between the recommended range of 10-40 mg/mL
2. $18 \text{ mg} / 10 \text{ mL} = 1.8 \text{ mg/mL}$
Answer: 1.8 mg/mL
3. Answer: B
Range is 6,000 mg-9,000 mg
 $6 \times 1,200 \text{ mg} = 7,200 \text{ mg}$
4. Answer: yes
The 1,000 mg falls between 1,000 mg and 1,500 mg and does not exceed 2,000 mg
5. Answer: yes
 $700 \text{ mg} \times 2 = 1,400 \text{ mg}$
The 1,400 mg falls between 1,000 mg and 1,500 mg and does not exceed 2,000 mg
6. Answer: B
 $40 \text{ mg} \times 30 \text{ kg} = 1,200 \text{ mg}$
 $400 \text{ mg} \times 3 = 1,200 \text{ mg}$
7. Answer: 50 mL/hr
 $25 \text{ mL} \times 60 \text{ gtt} / 30 \text{ min} = 50 \text{ mL/hr}$

Additional practice problems

1. Answer: The recommended range is 260 mg to 292.5 mg every 12 hours. The nurse will administer 5.5 ml of amoxicillin every 12 hours.
 $6.5 \text{ kg} \times 80 \text{ mg} / 2 = 260$
 $6.5 \text{ kg} \times 90 \text{ mg} / 2 = 292.5$
 $275 \text{ mg} / 250 \text{ mg} \times 5 \text{ mL} = 5.5 \text{ mL}$
2. Answer: C
 $1.1 \text{ g} \times 2 = 2.2 \text{ g}$
This exceeds the total dose of 2 g
3. Answer: A
 $40 \text{ mg} \times 16 \text{ kg} = 640 \text{ mg}$
 $640 \text{ mg} / 25 \text{ mL} = 25.6 \text{ mg/mL}$ which falls between 2.5 to 50 mg/mL
 $25 \text{ mL} \times 60 \text{ gtt} / 30 \text{ min} = 50 \text{ mL/hr}$
4. Answer: C
 $50 \text{ mL} \times 60 \text{ gtt} / 20 \text{ min} = 150 \text{ mL/hr}$

$$50 \text{ mL} \times 60 \text{ gtt} / 30 \text{ min} = 100 \text{ mL/hr}$$