

Autumn Ford

Medication math practice

1.  $350\text{mg}/25\text{mL} = 14\text{ mg/mL}$ , yes dilution is in recommended range
2.  $18\text{mg}/10\text{mL} = 1.8\text{mg/mL}$
3.  $200 \times 30 = 6000$ ,  $300 \times 30 = 9000$  :6000-9000 mg/24hrs  
1000-1500 mg/q 4hrs  
1500-2250mg/q 6hrs  
Answer is B 1200 mg q 4hrs
4.  $50 \times 20 = 1000\text{ mg}$ ,  $75 \times 20 = 1500\text{ mg}$ , 1000-1500mg/daily  
Yes, it is in prescribed range
5.  $(50 \times 20)/2 = 500\text{mg}$ ,  $(75 \times 20)/2 = 750\text{mg}$   
Yes, it is in the prescribed range
6.  $40 \times 30 = 1200\text{mg/day}$ , 300mg/q 6, 400mg/q 8, 600mg/ q 12  
Answer B: 400mg q 8 hrs
7.  $25/0.5 = 50\text{mL/hr}$

Additional practice problems

1.  $(80 \times 6.5)/2 = 260\text{mg}$ ,  $(90 \times 6.5)/2 = 292.5\text{mg}$   
Range: 260mg-292.5mg q 12  
Nurse will admin 275 mg/ q 12
2.  $25 \times 15 = 375\text{mg}$ ,  $27.5 \times 15 = 562.5\text{mg}$ : 375-562.5mg/q 12 hrs range  
Answer C: contact provider regarding dose exceeding recommended range
3.  $640/25 = 25.6\text{mg/mL}$ : concentration  
 $16 \times 40 = 640\text{ mg q 8 hrs}$   
 $25\text{ mL}/30\text{min} = 50\text{mL/hr}$   
Answer: administer medication at 50mL/hr
4.  $50/20 = 150\text{mL/hr}$ ,  $50/30 = 100\text{mL/hr}$   
Answer C: 100