

Meritt McGehee
2-22-21

Peds Med Math

1. Yes- 14 is within the recommended range of 10-40 mg per mL $350/25 = 14$
2. 1.8 mg per mL. $18/10 = 1.8$
3. B (1200 mg every 4 hrs) the therapeutic range is 6000-9000 with the HCP order the patient will receive 7200 mg/day which falls under the therapeutic range.
4. Yes. The recommended dose for the patient is 1000-1500mg and the HCP ordered 1000mg. $50 \times 20 = 1000$ $75 \times 20 = 1500$
5. Yes. The recommended dose for the patient is 1000-1500mg and the HCP ordered 700mg BID which is a total of 1400 which falls in the range.
6. B (400mg every 8hr) the amount the patient needs to receive is 1200. $40 \times 30 = 1200$
 $400 \times 3 = 1200$
7. 50mL/hr ($25 \times 2 = 50$)

Additional practice problems:

1. The recommended range is 260mg-292.5mg every 12 hr
 $6.5 \times 80 = 520$ $6.5 \times 90 = 585$ $520/2 = 260$ $585/2 = 292.5$
The nurse will administer 5.5 mL every 12 hrs
 $275\text{mg}/250\text{mg} = 1.1$
 $1.1 \times 5\text{mL} = 5.5\text{mL}$
2. C (Contact HCP dose exceeds rec range) :the 24 hr dose total would be 2.2 grams and that is above the 2g/24hrs range
3. A (admin at 50ml/hr) :you would set your pump to 50mg/hr since you want 25 to infuse in 30 min
4. C (100 mL/hr): You want 50 mL to be given over 30 min so you will set your pump to 100ml/hr