Med Math

1.) $\frac{350}{25} =$ 14 mg/mL   Yes

2.) $\frac{18}{10} =$ 1.8 mg/mL

3.)
$\begin{array}{r} 200 \\ \times\ 30 \\ \hline 6,000 \end{array}$
$\begin{array}{r} 300 \\ \times\ 30 \\ \hline 9,000 \end{array}$
1,200 mg
$\begin{array}{r} 1,200 \\ \times\ \ \ \ 4 \\ \hline 7,200 \end{array}$ B

4.) Yes
$\begin{array}{r} 50 \\ \times\ 20 \\ \hline 1,000 \end{array}$
$\begin{array}{r} 75 \\ \times\ 20 \\ \hline 1500 \end{array}$
1,000 ✓

5.) Yes   Divided doses $1000 \div 2 = 500$
$1500 \div 2 = 750$ > 700 mg

6.) B
$\begin{array}{r} 40 \\ \times\ 30 \\ \hline 1200 \end{array}$
$1200 \div 3 = 400$

7.)
$\begin{array}{c} 25\,mL \\ \times\ 2 \end{array} \Big/ \begin{array}{c} 30\,min \\ \times\ 2 \end{array}$
50 mL/hr   60 min = 1 hr

Additional Problems

1.) Amoxicillin 250mg/5mL = **50mg/mL** concentration

$$\begin{array}{c} 80 \\ \times 6.5 \\ \hline 520 \\ \div 2 \\ = \\ 260mg \end{array}$$ $$\begin{array}{c} 90 \\ \times 6.5 \\ \hline 585 \\ \div 2 \\ = \\ 292.5mg \end{array}$$ Recommended Range is **260mg** to **292.5mg** every 12hr

Nurse will administer **5.5ml** of Amoxicillin every 12 hrs.

2.) **2 grams/24 hr.**   Prescribed: 1.1 every 12 hr

$$\frac{\times 2}{2.2mg} \Big/ \frac{\times 2}{24hr}$$ Answer: **C**

Too high of a dosage

3.) **40 mg/Kg every 8 hrs.**

$$\begin{array}{c} 40 \\ \times 16 \\ \hline 640mg \end{array} / 8hr.$$ $$\frac{25 \times 60}{15} = \underline{100mL/hr}$$ Answer: **A**

$$\frac{25 \times 60}{30} = \boxed{50mL/hr}$$

4.) $$\frac{50 \times 60}{20} = 3000 \div 20 = 150ml/hr$$ Answer: **C** 100

$$\frac{50 \times 60}{30} = 3000 \div 30 = \boxed{100ml/hr}$$