

DR O: Morphine 10mg SQ  
A: Morphine 20mg/ml vial  
Find: ml?

$$\frac{10\text{mg}}{20\text{mg}} \times \text{ml} = 0.5\text{ml}$$

DR O: Heparin 5000 units SQ bid  
A: Heparin 20,000 units/ml  
Find: ml?

$$\frac{5000\text{units}}{20000\text{units}} \times \text{ml} = 0.25\text{ml}$$

DR O: Mirapex 250 mcg PO tid  
A: 0.125 mg Mirapex tablets  
Find: tablets?

$$0.125\text{mg} \times 1000 = 125\text{mcg}$$

$$\frac{250\text{mcg}}{125\text{mcg}} \times \text{tabs} = 2\text{tabs}$$

DR O: Prednisone 10mg PO bid  
A: Prednisone tablets 2.5mg  
Find: tablets?

$$\frac{10\text{mg}}{2.5\text{mg}} \times \text{tabs} = 4\text{tabs}$$

DR O: Gentamicin 60mg IM tid  
A: Gentamicin 80mg/2ml  
Find: ml?

$$\frac{60\text{mg}}{80\text{mg}} \times 2\text{ml} = 1.5\text{ml}$$

DR O: Tagamet 300mg IM  
A: Tagamet 300mg/2ml  
Find: ml?

$$\frac{300\text{mg}}{300\text{mg}} \times 2\text{ml} = 2\text{ml}$$

DR O: IV D5W 1000 ml over 8 hours  
A: 15 gtt/ml  
Find: drip rate (gtt/min)

$$\frac{1\cancel{\text{h}}}{60\text{min}} \times \frac{1000\cancel{\text{ml}}}{8\text{h}} \times \frac{15\text{gtt}}{\cancel{\text{ml}}}$$

$$\begin{aligned} &= 15000 \div 480 \\ &= 31.25 \text{ ROUND} \\ &= 31 \text{ gtt/min} \end{aligned}$$

DR O: 1500mg IV q8h diluted in 50ml of D5W  
over 30 mins  
A: 10 gtt/ml  
Find: gtt/min?

$$\begin{aligned} &\frac{50\cancel{\text{ml}}}{30\text{mins}} \times \frac{10\text{gtt}}{\cancel{\text{ml}}} \\ &= 16.\bar{6} \text{ ROUND} \uparrow \\ &= 17 \text{ gtt/min} \end{aligned}$$



DR O: Tagamet 300mg q6h. Dilute the medication in 50ml of D5W and infuse over 20 mins

A: 10gtt/ml

Find: drip rate (gtt/min)

$$\frac{50\text{mL}}{20\text{min}} \times \frac{10\text{gtt}}{\cancel{\text{mL}}} \\ = 500 \div 20 \\ = 25 \text{ gtt/min}$$

DR O: Keflex 1500mg IV q8h diluted in 50ml of D5W infused over 30mins

A: 10gtt/ml

Find: mL/hr?

$$\frac{50\text{mL}}{30\text{min}} \times \frac{60\text{min}}{1\text{hr}} \\ = 3000 \div 30 \\ = 100 \text{ mL/hr}$$

DR O: Heparin drip 50 units/hr

A: 25000 units in 500ml 0.9%

Find: mL/hr?

$$\frac{500\text{mL}}{25000\text{units}} \times \frac{50\text{units}}{1\text{hr}} \\ = 25000 \div 25000 \\ = 1 \text{ mL/hr}$$

DR O: Keflex 1g IV q8hrs diluted in 100ml of 5% Dextrose and infused over 30mins

A: 10gtt/ml

Find: mL/hr?

$$\frac{100\text{mL}}{30\text{min}} \times \frac{60\text{min}}{1\text{hr}} \\ = 6000 \div 30 \\ = 200 \text{ mL/hr}$$

DR O: Biaxin 500mg po q12hrs for URI

A: Biaxin 125mg/5ml

Find: mL?

$$\frac{500\text{mg}}{125\text{mg}} \times 5\text{mL} \\ = 4 \times 5 \\ = 20 \text{ mL}$$



DR O: Neoral 140 mg PO bid

A: 100mg/mL

Find: mL?



$$\frac{140 \text{ mg}}{100 \text{ mg}} \times \text{mL} \\ = 1.4 \text{ mL}$$

DR O: 1000 mL D5.45NS at 85 mL/hr

Find: vol to infuse?



$$1000 \text{ mL} \div 85 \text{ mL}$$

$$= 11.76 \text{ hrs}$$

$$0.76 \cdot 60$$

$$= 45.6$$

$$= 46 \text{ mins}$$

$$= 11 \text{ hours } 46 \text{ mins}$$

DR O: 650mg Ampicillin diluted in 100mL NS  
and infused over 200mL/hr

Find: infusion time?



$$100 \text{ mL} \div 200 \text{ mL}$$

$$= 0.5 \text{ hrs}$$

$$0.5 \cdot 60$$

$$= 30 \text{ min}$$

$$= 30 \text{ min}$$