## Med Calc Quiz \#5

1. Order: Tagamet 20 mg IV push now.

Available: Tagamet $30 \mathrm{mg} / 2 \mathrm{~mL}$
The literature recommends diluting the Tagamet to a total of 20 mL . Injection should be over a period of not less than 2 minutes. An injection of 5 minutes is ordered.
a. How many mL of Tagamet will you administer?
b. How many mL of NaCl will you add to obtain the desired
volume?
c. To administer the infusion in 5 minutes, how many mL should you infuse every minute?
d. How much should you infuse every 15 seconds? $\qquad$
2. Order: Ativan 3 mg IV push stat.

Available: Ativan $4 \mathrm{mg} / \mathrm{mL}$
The literature states not to exceed $2 \mathrm{mg} / \mathrm{min}$. Determine the time to administer the medication as ordered.
a. How many mL of Ativan will you prepare? $\qquad$
b. How many minutes would be needed to administer the drug as ordered? $\qquad$
3. A child's BSA is $0.8 \mathrm{~m}^{2}$ and the order is for 1.8 mg of a medication in $100 \mathrm{~mL} \mathrm{D}_{5} \mathrm{~W}$ at $10 \mathrm{a} . \mathrm{m}$. The recommended dosage is $2 \mathrm{mg} / \mathrm{m}^{2}$.
a. Calculate the recommended dosage for this child.
b. Is the dosage ordered within the recommended range?
4. A child weighing 10 kg has an order for IV solumedrol 125 mg IV $q 6 \mathrm{~h}$ for 48 hours. The Recommended daily dosage is $30 \mathrm{mg} / \mathrm{kg}$ IV. Is the ordered dose within the recommended range? $\qquad$
5. An IV solution of heparin is ordered for a client. $\mathrm{D}_{5} \mathrm{~W} 1000 \mathrm{~mL}$ containing 20,000 units of Heparin is to infuse at $30 \mathrm{~mL} / \mathrm{hr}$. Calculate the dosage of heparin the client is to receive per hour.
6. The heparin solution is 25,000 units of heparin in 500 mL of $\mathrm{D}_{5} \mathrm{~W}$. The order is to infuse 850 units of heparin per hour. How many $\mathrm{mL} / \mathrm{hr}$ would you infuse? $\qquad$
7. Order: Heparin 1000 units/hr

Solution: 1000 mL NS with 25,000 units of heparin
Calculate the rate in $\mathrm{mL} / \mathrm{hr}$. $\qquad$
8. Order: Infuse $750 \mathrm{~mL} \mathrm{D}_{5} \mathrm{~W}$ with 30,000 units of heparin at $25 \mathrm{~mL} / \mathrm{hr}$.

Calculate the dosage in units/hr.
9. A client weighs 176 lb . Heparin infusion 20,000 units in 1000 mL of NS. Order: Bolus with heparin sodium at 80 units $/ \mathrm{kg}$, then initiate drip at 18 units $/ \mathrm{kg} / \mathrm{hr}$. Calculate the following:
a. bolus dosage $\qquad$ _
b. infusion rate $\qquad$
c. $\mathrm{mL} / \mathrm{hr}$ $\qquad$

