1. An IV of Drug X 100 mg in 1000 mL is infusing at 20 mL/hr. The physician asks, How many mg/hr is the patient receiving? How many mcg/min? How many mcg/kg/min? The patient weighs 143 pounds today.

2. An IV of Drug X 250 mg in 500 mL is infusing at 15 mL/hr. The patient weighs 110 pounds. Calculate:
   mcg/hr __________________
   mcg/min __________________
   mcg/kg/min._________________

3. An IV of Drug X 400 mg in 1000 mL is infusing at 5 mL/hr. The patient weighs 121 pounds. Calculate:
   mcg/hr __________________
   mcg/min __________________
   mcg/kg/min._________________

4. An IV of Drug X 1000 mg in 250 mL is infusing at 10 mL/hr. The patient weighs 132 pounds.
   Calculate mcg/kg/min ______________________________
5. Ordered: Dopamine HCl (Intropin) 4 mcg/kg/min IV for a 110-lb patient. The literature states that the usual dose is 2 to 5 mcg/kg/min. Available: Dopamine 200 mg in 250 mL of D$_5$W.
   a) What is the safe dose range (SDR) for this patient?_______________________
   b) Is the order safe?____________
   c) Hourly drug order in mcg:__________________
   d) Hourly drug order in mg:__________________
   e) What is the hourly flow rate for the ordered dose?_____________________

6. Ordered: Dobutamine HCl (Dobutrex) 5 mcg/kg/min IV for a 132 pound patient. Available: Dobutamine 250 mg in 250 mL D$_5$W. The current flow rate is 36 mL/hr.
   a) Hourly drug order in mcg:____________________
   b) Hourly drug order in mg:_____________________
   c) Hourly flow rate to be set on the infusion device:_______________________
   d) Is the current infusion correct?______________

7. Ordered: Lidocaine 4 mg/min. Available: 1 g of lidocaine in 500 mL of D$_5$W.
   a) What is the hourly drug ordered?________________
   b) Hourly flow rate to be set on the infusion device:____________________
8. Ordered: Isuprel (isoproterenol hydrochloride) 5 mcg/min.  
Available: Isoproterenol hydrochloride 1 mg in 250 mL D5W.  
Calculate the hourly flow rate to be set on infusion device:____________________

9. Ordered: Initial infusion of norepinephrine at 50 mL/hr.  
Available: Norepinephrine 1 mg in 250 mL NS. The SDR is 8 to 12 mcg/min initially.  
Is the ordered dose safe?_______________________

10. An IV of Drug X 500 mg in 250 mL is infusing at 8 mL/hr. The patient weighs 175 pounds. Calculate:  
    a) mcg/kg/min:_______________________