HEPARIN MATH PROBLEMS

1) Your patient has an order for a Heparin bolus of 10,000 Units, followed by an IV drip of 18 Units/kg/hr.
   Your patient weighs 167 lbs.
   You have a Heparin vial labeled 5,000 Units/mL.

   What will you give your patient for the initial bolus?

   What will you set your IV pump at for a continuous drip if your 1 L IV bag has a total of 50,000 Units of Heparin?

2) Your patient has an order to receive a Heparin bolus of 4,000 Units, followed by an IV drip of 14 Units/kg/hr.
   Your patient weighs 203 lbs.
   You have a Heparin vial labeled 1,000 units/mL.

   What will you give your patient for the initial bolus?

   What will you set your IV pump at for a continuous drip if your 1 L IV bag is labeled 40,000 Units of Heparin?

3) According to the Spectrum Heparin Nomogram, your patient is to receive a bolus and an increase in the number of units per hour per physician order for Reduced Intensity Anticoagulation of an aPTT for a patient range of 45 to 54.
   Your patient weighs 143 lbs.
   Your patient has been receiving 12 Units/kg/hr.
   You have a Heparin vial labeled 1,000 units/mL.
   Your 1L IV bag has 50,000 Units of heparin.

   What will you give for the Heparin Bolus?

   What will you set your new pump rate at for continuous drip?
1) Pts’. Weight 76 kg.
   2 mL bolus
   1368 Units/hr. = 27.4 mL/hr

2) 92 kg.
   4 mL
   1288 Units/hr = 32.2 mL/hr

3) 65 kg.
   1300 units = 1.3 mL
   910 units/hr = 18.2 mL/hr