

# Practice Problems

## Calculation for Drug Dosages

1. Your patient with diabetes receives Glipizide 10 mg po every morning. The drug is supplied in 5-mg scored tablets. How many tablets will you administer?

$$\text{Formula is } \frac{\text{Desired}}{\text{Have}} = \frac{10 \text{ mg}}{5 \text{ mg}} = 2 \text{ tablets}$$

2. A patient has an order for 1000 ml of D5LR over 5 hours. How many ml/hr should the IV pump be programmed for?

$$\text{Formula is } \frac{\text{Volume (ml)}}{\text{Time (hrs)}} = \frac{1000 \text{ ml}}{5 \text{ hrs}} = 200 \text{ ml/hr}$$

3. The physician orders Heparin 2500 Units SQ every twelve hours for your patient. You have Heparin 5000 Units per ml available. How many milliliters will you administer?

$$\text{Formula is } \frac{\text{Desired}}{\text{Have}} \times \text{Volume} = \frac{2500 \text{ Units}}{5000 \text{ Units}} \times 1 \text{ ml} = 0.5 \text{ ml}$$

4. Your patient is to receive Vistaril 60 mg po every six hours for relief of nausea. Vistaril oral suspension, 25 mg per 5 ml, is supplied. How many milliliters will you administer?

$$\text{Formula is } \frac{\text{Desired}}{\text{Have}} \times \text{Volume} = \frac{60 \text{ mg}}{25 \text{ mg}} \times 5 \text{ ml} = 12 \text{ ml}$$

5. A patient with oliguria has an order for 500 ml of 0.9% NS IV over 4 hours. The drop factor is 10 gtt/ml. How many gtt/min should be given?

$$\text{Formula is } \frac{\text{Volume (ml)}}{\text{Time (min)}} \times \text{Drop Factor (gtt/ml)} = \frac{500 \text{ ml}}{240 \text{ min}} \times 10 \text{ gtt/ml} = 20.8 \text{ or } 21 \text{ gtt/min}$$