NURSING CALCULATIONS

Concentration, Flow Rate, Hourly Dosage

1. Calculate the concentration in mg/mL if
   a. The order is 300mg in 600mL normal saline
   b. The order is 100mg in 400mL normal saline
   c. The order is 200mg in 1L normal saline
   d. The order is 900mg in 400mL normal saline
   e. The order is 550mg in 440mL normal saline

2. Calculate the Flow Rate (in mL/hr) if
   a. Hourly Dosage: 3mg/hr
      Concentration: 60mg/250mL
   b. Hourly Dosage: 10mg/hr
      Concentration: 30mg/600mL
   c. Hourly Dosage: 5mg/hr
      Concentration: 10mg/150mL

2 d. Hourly Dosage: 15mg/hr
     Concentration: 60mg/200mL

2 e. Hourly Dosage: 20mg/hr
     Concentration: 20mg/300mL

3. Calculate the hourly dosage in mg/hr if
   a. Flow Rate: 200mL/hr
      Concentration: 30mg/600mL
   b. Flow Rate: 75mL/hr
      Concentration: 10mg/150mL
   c. Flow Rate: 50mL/hr
      Concentration: 60mg/200mL
   d. Flow Rate: 75mL/hr
      Concentration: 50mg/150mL
   e. Flow Rate: 100mL/hr
      Concentration: 15mg/60mL

Answers

1  a. 0.5mg/mL
    b. 0.25mg/mL
    c. 0.5mg/mL
    d. 1.25mg/mL
    e. 2.25mg/mL

2  a. 12.5mL/hr
    b. 200mL/hr
    c. 75mL/hr
    d. 50mL/hr

3  a. 10mg/hr
    b. 5mg/hr
    c. 15mg/hr
    d. 25mg/hr
    e. 25mg/hr