

# 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