Module 10 Notes

Flow Rate = gtt/min
Infusion Time = hours or minutes
Infusion Volume = mL
Calibration Drop Factor = gtt/mL

60 minutes = 1 hour

Microdrop = 60 mcgtt/mL

To find **flow rate**, start with **volume per time**.

To find **infusion time**, start with **volume**.

To find total **volume**, start with the **infusion time**.

Examples:

1. Lactated Ringer's 1000 mL IV to run at 125 mL/hr. How long will this IV last?

2. At 1530 hours the nurse starts D5W 2,000 mL IV to run at 125 mL/h. The infusion set used is calibrated for a drop factor of 15 gtt/mL. What is the infusion time? What is the completion time? Calculate the total volume to be infused per 24 hours.

3. Tetracycline is prepared in 50 mL of an IV solution. It is infusing at 30 drops per minute. The drop factor of the infusion set is 20gtt/mL. What is the total infusion time?

4. A 10% D/W solution is infusing at a rate of 30gtt/min. The infusion set is calibrated for a drop factor of 20 gtt/mL. How many milliliters of the solution will infuse in 4 hours?

5. A solution of Lactated Ringer's is infusing at a rate of 28 gtt/min. The infusion set is calibrated for a drop factor of 10 gtt/mL. The physician has ordered that the Lactated Ringer's solution be replaced with 1000 mL of 0.45% NS at 12 noon. It is now 8:30 am. How many milliliters of Lactated Ringer's solution will infuse before the solution is discontinued?