Calculating Drop Factor with Gravity IV Infusions

- Identify the **drop factor** of your IV administration set (tubing) found on the label of the tubing package. **Macrodrip sets are either 10, 15 or 20 drops to deliver 1 mL of fluid in a minute.** Microdrip sets are commonly 60.

- Formula to calculate gravity flow rates:
  - **mL/hr divided by 60 minutes (I hour) x drop factor = drops/minute (rounded off)**

Examples using Macrodrip drop factors:

A. IV fluid of 125mL/hr using tubing with drop factor of 10.
- 125mL/hr divided by 60 minutes = 2.08mL/min
- 2.08mL/min X 10 drop factor = **21 drops/min**

B. IV fluid of 125mL/hr using tubing with drop factor of 15.
- 125mL/hr divided by 60 minutes (1 hour) = 2.08mL/min
- 2.08mL/min X 15 drop factor = **31 drops/min**

C. IV fluid of 125mL/hr using tubing with drop factor of 20.
- 125mL/hr divided by 60 minutes = 2.08mL/min
- 2.08mL/min X 20 drop factor = **42 drops/min**

Count for <u>1 full minute</u>:

One drip!!! HAHAHA…

Two drips!!! HAHAHA…

Three drips!!! HAHAHA!!…

- **Confirm/monitor the gravity infusion rate for accuracy**; Flow control devices (dial a flow) do **NOT** replace this responsibility.

- **Count the drops/minute for a *full minute*** when infusing by gravity and setting the clamp/confirming the drip rate.

Common drops/minute for infusions using **10 drop factor** tubing (Continu-Flo Solution Set 2C8537):

150mL/hr = 25 drops/min	**75mL/hr = 13 (12.5) drops/min**
125mL/hr = 21 (20.8) drops/min	**50mL/hr = 8 (8.3) drops/min**
100mL/hr = 17 (16.6) drops/min	**25mL/hr = 4 (4.1) drops/min**