CALCULATING IV DRIP RATES

When you have an order for an IV infusion, it is the nurse's responsibility to make sure the fluid will infuse at the prescribed rate. IV fluids may be infused by gravity using a manual roller clamp or dial-a-flow, or infused using an infusion pump.

$$\text{IV Drip Rate} = (\text{Volume}/\text{Time}) \times \text{Drop Factor}$$

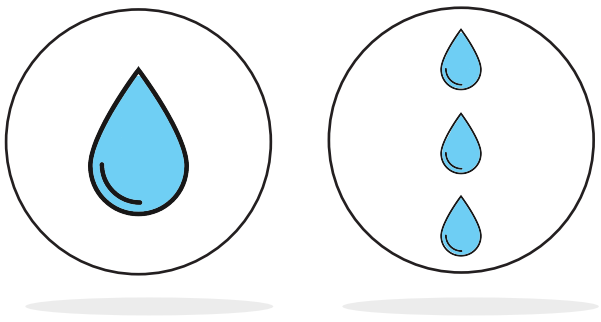
(gtt/min) *(mL)* *(minutes)* *(gtt/mL)*

If you simply need to figure out the infusion rate, or the mL per hour to infuse, take the total volume in mL, divided by the total time in hours that the medication is ordered to be infused over, to equal the rate in mL per hour.

Important Conversions

- **L to mL:** $1\text{L} = 1{,}000\ \text{mL}$
- **Hours to minutes:** $1\ \text{hr} = 60\ \text{min}$

Macrodrip *Microdrip*



Macrodrip tubing delivers 10-20 gtt/mL and is used to infuse large volumes or to infuse fluids quickly. **Microdrip** tubing delivers 60 gtt/mL and is used for small or very precise amounts of fluid, as with neonates or pediatric patients.