Nurs 3400: Infusions

Order: Administer D5W IV @ 70mL/h for 24 hrs. The initial flow rate was correctly set using micro-drop tubing. After 4 hrs, the infusion is off schedule with 600 mL remaining in the initial 1 L bag. Your facility policy is to notify the ordering physician if flow rates require adjusting more than 25% of the original rate.

* Calculate new flow rate in mcg/min so infusion will finish on time.

\[
\frac{24\text{h}}{70\text{mL}} = \frac{1680\text{mL}}{1\text{h}} - \frac{400\text{mL}}{1280\text{mL}} \quad \frac{1280\text{mL}}{20\text{hr}} \quad \frac{1\text{h}}{60\text{min}} \quad \frac{1\text{mL}}{604\text{mcg}} = \frac{64\text{mcg}}{\text{min}}
\]

* Calculate the adjustment for flow rate allowed by the facility.

\[
\frac{70\text{mcg}}{1\text{h}} \quad \frac{60\text{mcg}}{1\text{mL}} = 70 \text{ mcg} / \text{min}
\]

\[
70(0.25) = 17.5 \text{ mcg/min} \quad \Rightarrow \quad 18 \text{ mcg/min}
\]

\[
70 + 18 = 88 \quad \frac{52 - 88 \text{ mcg/min}}{64}
\]

\[
70 - 18 = 52
\]