



Math Study Strategies

Math for Nursing Obstetric Medication

1. The MD orders augmentation of labor with Pitocin (Oxytocin). Pitocin comes in a vial with 10U/cc and is added to 1 liter of Normal Saline (NS).

The order reads? "Begin augmentation at 1mU/min and increase by 1mU q 30 minutes."

- a. What is the concentration of the solution?

Because the concentration mU/per cc is asked, start with this value in the numerator

$$\frac{\cancel{1000}mU}{\cancel{1U}} \times \frac{\cancel{10U}}{\cancel{1000}cc} = \frac{10mU}{cc}$$

- b. What is the flow rate needed to begin the infusion 1MU/min?

Because the flow rate is in mL/hr, start with this value in the numerator.

$$\frac{\cancel{1mU}}{\cancel{min}} \times \frac{1mL}{\cancel{10mU}} \times \frac{\cancel{60min}}{1hr} = \frac{60}{10} = \frac{6mL}{hr}$$

- c. What would be the flow rate to infuse Pitocin at 12mU/min?

$$\frac{1mL}{\cancel{10mU}} \times \frac{\cancel{12mU}}{\cancel{min}} \times \frac{\cancel{60min}}{1hr} = \frac{720}{10} = 72 \frac{mL}{hr}$$