

Module 1-10 questions Module 2-10 questions Worksheet

9. The order is to give midazolam 2mg IV now. The drug is supplied as 10mg/mL. How

many mL will you give?

$$\frac{2 \text{ mg}}{x} = \frac{10 \text{ mg}}{1 \text{ mL}} = 0.2 \text{ mL}$$

10. Infuse Doripenem 500mg IV over 8 hrs. The drug is supplied as 500mg/100mL. The drip

factor is 60. How many gtt/min will you infuse?

$$\frac{500 \times 60}{480} = 62.5 = 63 \text{ gtt/min}$$

Worksheet 2

$$175 \text{ lb} = 79.55$$

1. The patient is receiving Nipride, currently infusing at 142 mL/hr. The IV bag of Nipride reads 50 mg in 500 mL D5W. The patient weighs 175 lbs. How many mcg/kg/min are

$$\frac{50 \text{ mg}}{500 \text{ mL}} = 0.1 \text{ mg/mL} = 100 \text{ mcg/mL}$$

infusing? Round to the nearest tenth.

$$\frac{100 \times 142}{79.55 \times 60} = \frac{14,200}{4,773} = 3.0 \text{ mcg/kg/min}$$

2. The physician has ordered Dobutrex for a patient. The order states to start the Dobutrex at 1 mcg/kg/min, and titrate as needed. The IV bag of Dobutrex contains 250 mg in 500 mL D5W. The patient weighs 70 kg. How many mL/hr should the IV pump be set at to achieve the starting dose? Round to the nearest whole number.

$$\frac{250 \text{ mg}}{500 \text{ mL}} = 0.5 \text{ mg/mL} \times 1000 = 500 \text{ mcg}$$

$$\frac{70 \text{ kg} \times 1 \text{ mcg/kg} \times 60 \text{ mL/hr}}{500 \text{ mcg/mL}} = 8 \text{ mL/hr}$$

3. The patient is currently receiving Nitroglycerine at 12 mL/hr. The bottle reads 100 mg Nitroglycerine in 250 mL D5W. How many mcg/min is the patient receiving?

$$\frac{100 \text{ mg}}{250 \text{ mL}} = 0.4 \text{ mg/mL} \times 1000$$

$$\frac{400 \text{ mcg/mL} \times 12 \text{ mL/hr}}{60} = 80 \text{ mcg/min}$$

4. The physician orders Heparin infusion at 500 units/hr. The bag of Heparin reads 25,000 units in 250 mL D5W. How many mL/hr should be showing on the IV pump?

$$\frac{500 \text{ u}}{\text{hr}}$$

$$\frac{25,000}{250} \frac{100 \text{ units}}{\text{mL}} = \frac{500 \text{ units}}{x} = 5 \text{ mL/hr}$$

5. The physician has ordered Dopamine to start at 2 mcg/kg/min. The patient weighs 165 lbs. The bag of Dopamine reads 800 mg in 500 mL D5W. What rate would the nurse set on the infusion pump? Round to the nearest tenth.

$$165 \text{ lb} = 75 \text{ kg} \quad \frac{800 \text{ mg}}{500 \text{ mL}} = 1.6 \text{ mg/mL} = 1600 \text{ mcg/mL}$$

$$\frac{75 \times 2 \text{ mcg/kg/min} \times 60}{1600} = 5.6 \text{ mL/hr}$$