Module 1-10 questions Module 2-10 questions Worksheet

Name Madison Gage

1. Infuse ceftriaxone 1 gram over 45 minutes. The drug is supplied as 1gram/50ml. The drip factor is 15. How many gtt/min will you infuse?

$\frac{50\text{mL} \times 15}{45} = 17\ \text{gtt/min}$

$\frac{1\text{g}}{x} = \frac{1\text{g}}{50\text{mL}}$

$50 = x$

2. The physician writes an order to give 1000mL of normal saline over 8hrs. How many mL/hr will you infuse? $1000/8 = 125\ \text{mL/hr}$

3. Infuse vancomycin hydrochloride 1.5 gram over 3 hours. The drug is supplied as 1.5 gram/250mL. The drip factor is 15. How many gtt/min will you infuse?

$\frac{250\text{mL} \times 15}{180} = 21\ \text{gtt/min}$

4. An order has been written to give cefazolin 1gram over 30 minutes. The drug is supplied as 1 gram/50mL. The gtt factor is 60. How many gtt/min will you infuse?

$\frac{50\text{mL} \times 60}{30} = 100\ \text{gtt/min}$

5. The nurse is to give Ciprofloxacin 500mg IV over 1 hr. The drug is supplied as 1gram/250mL. The gtt factor is 15. How many gtt/min will you infuse?

$\frac{125\text{mL} \times 15}{60} = 32\ \text{gtt/min}$

$\frac{500\text{mg}}{x} \quad \frac{1{,}000\text{mg}}{250\text{mL}}$

$1{,}000x = 125{,}000$

$\frac{1{,}000}{1{,}000}$

6. An order is received for Fentanyl 75mcg IV now. The drug is supplied as 100mcg/2mL. How many mL will you give?

$x = 1.5\ \text{mL}$

$\frac{100\text{mcg}}{2\text{mL}} = \frac{75\text{mcg}}{x}$

$100x = 150$

$\frac{100}{100}$

7. Infuse 1000 mLs normal saline over 4 hrs. How many mL/hr will you set on the pump?

$1000/4 = 250\ \text{mL/hr}$

8. The patient is to receive metoprolol 5mg for chest pain. The drug is supplied as 20mg/5mL. How many mL will you give? (Do not round your final answer)

$\frac{5\text{mg}}{x} = \frac{20}{5}$ $\quad \frac{20x}{20} = \frac{25}{20}$ $\quad x = 1.25\ \text{mL}$

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6. The physician in the previous questions has now written an order to increase the Dopamine to 4 mcg/kg/min. Using the information in the previous question, what rate would the nurse set on the IV pump? Round to the nearest tenth.

$$\frac{75 \times 4 \times 60}{1,600} = 11.3 \text{ mL/hr}$$

7. The patient is on an Insulin drip infusing at 5 units/hr. The bag is labeled 100 units insulin in 250 mL NS. At what rate should the pump be infusing? Round to the nearest whole number.

$$5 / .4 = 13 \text{ mL/hr}$$

8. The patient is on a Dopamine drip infusing at 35 mL/hr. The label reads 400 mg dopamine in 500 mL D5W. The patient weighs 62 kg. How many mcg/kg/min is the patient receiving? Round to the nearest tenth.

$$\frac{800 \times 35}{62 \times 60} \quad 2\,8{,}000 \quad 3720 = 7.5 \text{ mcg/kg/min}$$

9. The physician has ordered Rocephin 1 gram IV over 30 minutes. Pharmacy has sent a bag labeled Rocephin 1 gram in 50 mL/ D5W. The IV tubing delivers 15 gtt/mL. How many drops per minute (gtt/min) will the nurse deliver?

$$\frac{50 \times 15}{30} = 25 \text{ gtt/min}$$

10. The patient is to receive Cipro 400 mg IV over 1 hour. You receive a bag from the pharmacy labeled Cipro 400 mg in 100 mL D5W. The IV tubing delivers 12 gtt/mL. How many drops per minute (gtt/min) will the nurse deliver?

$$\frac{100 \times 12}{60} = 20 \text{ gtt/min}$$