Pharmacology Review Quiz:

1. Order: Xylocaine 1 g IV in 500 mL D5W at 3 mg/min.
   Set the infusion pump at _____ mL/hr

2. Order: Nipride 500 mg IV in 250 mL D5w at 2 mcg/kg/min for a patient weighing 125 lb.
   Administer at _____ mL/hr

3. Order: Aminophylline 1 g IV 500 mL D5W to infuse at 20 mg/hr
   Set the infusion pump at _____ mL/hr

4. Order Lidocaine 4 g IV in 1 L D5W at 3 mg/min
   Set the infusion pump at _____ mL/hr

5. Order: Pronestyl 250 mg IV in 500 mL D5W at 4 mg/hr
   What is the flow rate in mL/hr?

6. Order: Isuprel 4 mg IV per 500 mL D5W at 6 mcg per minute.
   Set the infusion pump rate at _____ mL/hr

7. Order: Dopamine 500 mg IV in 0.5 L NS at 6 mcg/kg/min.
   Patient weight is 150 lb
   What is the flow rate in mL/hr?

8. Order: Dopamine 300 mg IV in 250 mL NS at 2 mcg/kg/min.
   The patient weighs 85 kg.
   Flow rate: _____ mL/hr

9. Order: 100 units regular insulin IV in 250 mL 0.9%NS to infuse at 12 u/hr
   Flow rate: _____ mL/hr

10. Order: Add 10,000 units Heparin to 500 mL D5W and infuse at 100 u/hr IV.
    Flow rate: _____ mL/hr

11. Order: Aminophylline 2 g IV in 1 L D5W to infuse at 0.4 mg/kg/hr
    Patient weight 55 kg
    Infuse at _____ mL/hr

12. Order: nitroglycerine 50 mg in 250 mL D5W to infuse at 3 mcg/kg/min
    Patient weight 50 kg
    Infuse at _____ mL/hr

*Please note there is no official study guide for NLN Exams. RN-BS Online Students have found this quiz useful in preparing for the Pharmacology NLN exam. This information is not provided by the National League of Nursing and is not associated in any way.

13. Order: Dobutamine 250 mg IV in 250 mL D5W to infuse at 5 mcg/kg/min
    Patient weight 85 kg
    Infuse at _____ mL/hr

14. Order: Heparin 25,000 units IV in 250 mL D5W to infuse at 6 mL per hour.
    How many units per hour is the patient receiving?

15. Order: Infuse regular insulin 200 u IV in 500 mL NS at 25 mL/hr.
    How many units per hour is the patient receiving?

16. Order: Nipride 50 mg IV in 250 mL D5W to infuse at 60 mL/hr
    How many mg/hr is the patient receiving?

17. Order: Aminophylline 2 g in 1000 mL D5W to infuse at 22 mL/hr IV
    The safe dose is 0.4 mg/kg/hr
    Patient weight is 55 kg
    Is the IV dose at the present flow rate safe?

18. Drug "a" 1 g in 250 mL D5 1/2 NS is infusing at 14 mL/hr intravenously.
    Safe dose is 12.5 mcg/kg/min
    Patient weight is 165 lb.
    Is the IV dosage safe?

19. Order: 50,000 units Heparin IV in 250 mL NS to infuse at 6 mL/hr
    Safe infusion rate is 1000 units per hour
    Is the ordered dosage safe?

20. Order: 200 units regular insulin in 250 mL NS to infuse at 7 units per hour IV
    When you come on duty the PLUM IV infuser is set at 14 mL/hr
    Is it set at the correct rate?
    What is the correct rate?

Pharmacology Review Quiz Answer Key:

1. 90 mL per hour

mL/hr =	500 mL X	1 g X	3 mg X	60 min	= 90 mL/ hr
	1 g	1000 mg	1 min	1 hr	

2. 3 mL/hr

125 ÷ 2.2 = 57 kg
2 mcg * 57 kg * 60 = 6840 mcg/hr

mL/hr =	250 mL X	1 mg X	6840 mcg	= 3.4 or 3 mL/ hr
	500 mg	1000 mcg	1 hr	

3. 10 mL/hr

mL/ hr =	500 mL X	1 g X	20 mg	= 10 mL/ hr
	1 g	1000 mg	1 hr	

4. 45 mL/hr

mL/ hr =	1000 mL X	1 L X	1 g X	3 mg X	60 min	= 45 mL/ hr
	1 L	4 g	1000 mg	1 min	1 hr	

5. 8 mL/hr

mL/ hr =	500 mL X	4 mg	= 8 mL/ hr
	250 mg	1 hr	

6. 45 mL/hr

mL/ hr =	500 mL X	1 mg X	6 mcg X	60 min	= 45 mL/ hr
	4 mg	1000 mcg	1 min	1 hr	

7. 24 mL/hr

*Please note there is no official study guide for NLN Exams. RN-BS Online Students have found this quiz useful in preparing for the Pharmacology NLN exam. This information is not provided by the National League of Nursing and is not associated in any way.

150 lb ◆ 2.2 = 68 kg
6 mcg*68 kg* 60 = 24480 mcg/hr

mL/ hr =	1000 mL X	0.5 L X	1 mg X	24480 mcg	= 24.4 or 24 mL/ hr
	1 L	500 mg	1000 mcg	1 hr	

8. 9 mL/hr

2 mcg* 85 kg* 60 = 10200 mcg/hr

mL/ hr =	250 mL X	1 mg X	10200 mcg	= 8.5 or 9 mL/ hr
	300 mg	1000 mcg	1 hr	

9. 30 mL/hr

mL/ hr =	250 mL X	12 U X	= 30 mL/ hr
	100 U	1 hr	

10. 5 mL/hr

mL/ hr =	500 mL X	100 U	= 5 mL/ hr
	10,000 U	1 hr	

11. 11 mL/hr

0.4 mg* 55 kg = 22 mg/hr

mL/ hr =	1000 mL X	1 L X	1 g X	22 mg	= 11 mL/ hr
	1 L	2 g	1000 mg	1 hr	

12. 45 mL/hr

3 mcg* 50 kg*60 = 9000 mcg/hr

mL/ hr =	250 mL X	1 mg X	9000 mcg	= 45 mL/ hr
	50 mg	1000 mcg	1 hr	

13. 26 mL/hr

5 mcg* 85 kg* 60 = 25,500 mcg/hr

mL/ hr =	250 mL X	1 mg X	25500 mcg	= 25.5 or 26 mL/ hr
	250 mg	1000 mcg	1 hr	

14. 600 u per hour

U/ hr =	25000 U X	6 mL	= 600 U/ hr
	250 mL	1 hr	

15. 10 u/hr

U/ hr =	200 U X	25 mL	= 10 U/ hr
	500 mL	1 hr	

16. 12 mg/hr

mg/ hr =	50 mg X	60 mL	= 12 mg/ hr
	250 mL	1 hr	

17. No

Safe dose = 0.4 mg * 55 kg = 22 mg/hr ; Client is receiving twice the safe dose.

mg/ hr =	1000 mg X	2 g X	22 mL	= 44 mg/ hr
	1 g	1000 mL	1 hr	

18. Yes

Safe dose = 12.5 mcg * 75 kg * 60 = 56.25 mg/hr

mg/ hr =	1000 mg X	1 g X	14 mL	= 56 mg per hr; same as safe dose
	1 g	250 mL	hr	

19. No

Safe rate = 1000 u/hr; Client's dose 1200 u/hr (significantly higher than safe dose).

U/ hr =	50,000 U X	6 mL	= 1200 U/ hr
	250 mL	1 hr	

20. No

Order: 7 u/hr
Dose being delivered: 8.75 u/hr (significantly higher than the order)

Rate the IV should be set at: 8.7 or 9 mL/hr

Units per hour being delivered			
U/ hr =	200 U X	14 mL	= 8.75 U/ hr being delivered
	250 mL	1 hr	

Rate the IV should be set			
mL/ hr =	250 mL X	7 U	= 8.7 or 9 mL/ hr
	200 U	1 hr	