MATH 075 PROFICIENCY EXAM SAMPLE QUESTIONS

Instructions: Calculators are NOT allowed

Place only one answer on the line provided

Show all work

All answers must be complete and labeled

Carry all answers to 2 decimal places and DO NOT round answers

Part I

12. Convert
$$103.8^{\circ}F$$
 to _____ $^{\circ}C$

15. Convert
$$38.5^{\circ}C$$
 to _____ $^{\circ}F$

16.
$$1.5 g = ____ mg$$

PART II

17.	You are to administer g iv to your patient. How many mg will you be giving?
18.	Solve for x: 450 mg : 6.0 mL :: 225 : x mL
19.	Convert: 650 mg = g
20.	Solve for x <u>0.4 mg</u> = <u>0.6 mg</u> x 2 mL
	Each tablet of a medication contains 250 mcg. How many tablet(s) would give if the order was for 0.125 mg?
22.	FUROSEMIDE Oral Solution 10 mg per mL 1 three is a rule in the r
23.	FORSON Some Give Morphine 30mg MORPHONE 15 INJECTION, USP 15 mg per ml. Multiple Dose
24.	The patient weighs 204 pounds 4 ounces. What is the weight in kilograms?
25.	The order reads Phenobarbitol 30 mg PO. You have on hand Phenobarbitol 100 mg / 5 mL How many mL will you give?
26.	Convert: 180 mg = g
27.	You are to administer 4 T of Mylanta to your patient. The calibrated medicine cup only has markings for ounces. How many ounces will you give?

PART II (cont)

28. Solve for x: x = 4.2 / (5.3 x 2.8)

29. Convert: $2.3 g = ___ mg$

30. The order reads Omnipen 1.5 g IM. The label reads Omnipen 1000 mg / 2 mL. How many mL will you give?

31. Convert: 750 mcg = ____ mg

32. The medication order is for 750 mg. The label reads 250 mg / 2.5 mL. How many mL will you give?

33. Susie and her mother weigh 180 pounds 6 ounces when they are weighed together. Susie's mother weighs 144 pounds 14 ounces. How much does Susie weigh?

34. Using the following directions for reconstitution, give Unasyn 1000 mg

Preparation for Intramuscular Injection

1.5 g and 3.0 g Standard Vials: Vials for intramuscular use may be reconstituted with Sterile Water for Injection USP, 0.5% Lidocaine Hydrochloride Injection USP or 2% Lidocaine Hydrochloride Injection USP. Consult the following table for recommended volumes to be added to obtain solutions containing 375mg Unasyn per mL (250mg ampicillin/125 mg sulbactam per mL) Note: Use only freshly prepared solutions and administer within one hour after preparation.

UNASYN Vial Size	Volume of Diluent to be Added	Withdrawal Volume *
1.5 g	3.2 mL	4.0 mL
3.0 g	6.4 mL	8.0 mL

*There is sufficient excess present to allow withdrawal and administration of the stated volumes.

MATH 075 PROFICIENCY EXAM ANSWERS

PARTI

- 1. 9
- 2. vii
- 3. 5/24
- 4. 1
- 5. 0.7
- 6. 14.07
- 7. 22.86
- 8. 0.4
- 9. 22 pounds, 0 ounces
- 10. 1630
- 11. 90 mL
- 12. 39.8°C
- 13. 0.003 g
- 14. 1 L
- 15. 101.3°F
- 16. 1500 mg

PART II

- 17. 4000 mg
- 18. 3.0 mL
- 19. 0.65 g
- 20. 1.33 mL
- 21. 1/2 tab
- 22. 10 mL
- 23. 2 mL
- 24. 92.84 kg
- 25. 1.5 mL
- 26. 0.18 g
- 27. 2 ounces
- 28. 0.28
- 29. 2300 mg
- 30. 3 mL
- 31. 0.75 mg
- 32. 7.5 mL
- 33. 35 lb 8 ounces
- 34. 2.66 mL