Bethel College
Fundamentals of Nursing
Math/Drug Proficiency Fall Review 2 KEY

Calculate the following problems. Unless indicated, all medications involving mL greater than 1 should be rounded to the nearest tenth. Answers in mL that are less than 1 should be rounded to the nearest hundredth. All answers involving tablets should be recorded in terms of # of tabs (or ½ tabs).

1. Asulfidine 250 mg is ordered. You have Azulfidine 500 mg tablets available.
   Give _____**0.5**_____tab.

X tab = 1 tab/500 mg x 250 mg/1

2. Synthyroid 0.15 mg is ordered. You have Synthyroid 150 mcg tablets available.
   Give _____**1**_____tab.

X tab = 1 tab/150 mcg x 1000 mcg/1 mg x 0.15 mg/1

3. Procan SR 1.5 g is ordered. You have Procan SR 750 mg tablets available.
   Give _____**2**_____ tab.

X tab = 1 tab/750 mg x 1000 mg/1 g x 1.5 g/1

4. Ceclor 374 mg is ordered. You have Ceclor 187 mg in 5 mL available.
   Give _____**10**_____mL.

X mL = 5 mL/187 mg x 374 mg/1

5. A dosage of Heparin 7500 units has been ordered. The strength available is
   10,000 units in 1.0 mL. Give _____**0.75**_____mL.

X mL = 1 mL/10,000 units x 7500 units/1

6. The order is gr 1/6 Morphine subcutaneous. You have Morphine 10 mg in 1 mL
   available. Give _____**1**_____mL.

X mL = 1 mL/10 mg x 60 mg/gr 1 x gr 1/6 /1

7. The order is for Gentamycin 60 mg. You have Gentamycin 80 mg in 1.4 mL available. Give _____**1.1**_____mL.

X mL = 1.4 mL/80 mg x 60 mg/1

8. The dosage strength is 240 mcg in 5 mL. Prepare a 0.2 mg dose.
    Give _____**4.2**_____mL.

X mL = 5 mL/240 mcg x 1000 mcg/1 mg x 0.2 mg/1

9. The order is for Morphine gr 1/8. You have Morphine gr 1/6 in 1 mL available.
    Give _____**0.75**_____mL.

X mL = 1 mL/gr 1/6 x gr 1/8 /1

10. The order is for Atropine 0.3 mg. You have Atropine 0.4 mg per mL available.
    Give _____**0.75**_____mL.

X mL = 1 mL/0.4 mg x 0.3 mg/1

11.   Penicillin G powder 1 million units requires the addition of Normal Saline prior to its IM administration. The Penicillin G vial label includes directions which could result in three different concentrations of medication.

Amount Saline Added	*Resulting Dosage Strength*
18.8 mL	250,000 units/mL
10.2 mL	400,000 units/mL
8 mL	500,000 units/mL

a. It is up to the nurse to determine how to prepare this medication. If the order is for 200,000 units as a single IM injection, which of the three strengths would you prepare?
_____**250,000, 400,000, 500,000**_____units/mL.

b. How much saline would you need to add to the powder in order to result in this dosage strength? _____**18.8, 10.2, 8**_____mL.

c. How many mL of reconstituted medication would you need to draw up from this vial to provide your client with the 200,000 unit dosage? _____**0.8, 0.5, 0.4**_____mL.

X mL = 1 mL/250,000 units x 200,000 units/1

X mL = 1 mL/400,000 units x 200,000 units/1

X mL = 1 mL/500,000 units x 200,000 units/1

12. Your order: give Lasix 60 mg IV. The Lasix comes prepared as 40 mg/4 mL. How much will you draw up to give? Give _____**6**_____mL.

X mL = 4 mL/40 mg x 60 mg/1

13. You have orders to give Codeine 30 mg. The tablets come prepared with gr 1/4 per 1 tablet. How many tablets will you give?
Give _____**2**_____tab.

X tab = 1 tab/gr ¼ x gr 1/60 mg x 30 mg/1

14. You have orders to give Phenobarb gr ½ . The tablets come prepared with 15 mg per tablet. How many tablets will you give? Give _____**2**_____tab.

X tab = 1 tab/15 mg x 60 mg/gr 1 x gr ½/1

15. You have orders to give Digoxin 0.125mg. The Digoxin comes as 250 mcg per tablet. How many tablets will you give? Give _____**0.5**_____tab.

X tab = 1 tab/250 mcg x 1000 mcg/1 mg x 0.125 mg/1

16. The order is for Aspirin gr 5 stat for a patient with chest pain. The tablets come prepared with 325 mg per tablet. How many tablets will you give?
Give _____**1**_____tab.

X tab = 1 tab/325 mg x 60 mg/gr 1 x gr 5/1

17. Your patient has orders for Jevity bolus feedings 1 can (8oz) every 4 hours. Each feeding is followed with 60 mL of water. How much will you record for 1 feeding? _____**300**_____mL.

X mL = 30 mL/1 oz x 8 oz/1 = 240 mL + 60 mL

18. Tagamet 0.2 g is ordered for your patient at bedtime. The tablets have 400 mg per tablet. How many tablets will you give? Give _____**0.5**_____tab.

X tab = 1 tab/400 mg x 1000 mg/1 g x 0.2 g/1

19.   Your patient has KCL 35 mEq ordered bid. The medication comes prepared with 40 mEq in 20 mL. How much will you administer? Give _____**17.5**_____mL.

X mL = 20 mL/40 mEq x 35 mEq/1

20.   The patient has orders for Atropine gr 1/150. The label reads Atropine 0.2 mg/mL. How much will you administer? Give _____**2**_____mL.

X mL = 1 mL/0.2 mg x 60 mg/gr 1 x gr 1/150 /1

21.   The patient has orders for Thyroid elixir gr 1/4. The medication comes prepared with 25 mg per 5 mL. How much elixir will you give? Give _____**3**_____mL.

X mL = 5 mL/25 mg x 60 mg/gr 1 x gr ¼/1

22.   gr 15 =   _____**900 or 1000**_____mg.

X mg = 60 mg/gr 1 x gr 15/1   OR   gr 15 = 1000 mg

23.   2 tsp =   _____**10**_____mL.

X mL = 5 mL/1 tsp x 2 tsp/1

24.   3 oz =   _____**90**_____mL.

X mL = 30 mL/1 oz x 3 oz/1