

Questions 1 & 2: 20 points each, questions 3 - 14: 5 points each

1. You have a prescription to prepare 150 ml of clonidine 0.1 mg/5 ml suspension. The patient is to take one teaspoonful every morning. You have clonidine 0.1 mg tablets and distilled water. Assume that it will take 20 minutes to prepare this prescription.

Clonidine 0.1 mg tablets \$30/#100 tabs, Lot #STS62, Expires 07/2015

Distilled water, \$1/1000mL, Lot #73, Expires 09/2014

A. Calculate the amount of each ingredient needed to compound the prescription

B. Calculate the cost of each ingredient and the total cost of the prescription. Labor should be estimated at \$40/hour.

C. If you charge a \$5.00 dispensing fee, what will be the selling price of the prescription?

D. The patient is given a 10% discount, what is the final sales price of the prescription?

E. What is the expiration date you would assign to this prescription and what is the days supply you would report to the insurance company?

2. A prescription is written for salicylic acid 1%, menthol 1/4% in Eucerin cream. The cream should be applied twice daily. The prescription calls for 200 g of the cream. The prescription will take 15 minutes to prepare. Assume the patient will use 2g each time it is applied.

Salicylic Acid powder cost \$5/5g. Lot # X1B, Expires 03/2017

Menthol crystals cost \$5/g. Lot 37X, Expires 03/2017

Eucerin cream cost \$9.40/240g. Lot SR71, Expires 08/2017

A. Calculate the amount of each ingredient needed to compound the prescription.

B. Calculate the cost of each ingredient and the total cost of the prescription. Labor should be included at \$40/hour.

C. If you charge a \$6.00 dispensing fee, what will be the selling price of the prescription?

D. The patient is given a 5% discount, what is the final sales price of the prescription?

E. What is the expiration date you would assign to this prescription and what is the days supply you would report to the insurance company?

Use the following to answer questions 3-6:

Use this table to determine the dispensing/professional fee:

AWP Dispensing/Professional Fee

less than \$20.00 = \$4.00

\$20.01 - \$50.00 = \$5.00

Greater than \$50.01 = \$6.00

then calculate the gross profit and the net profit for the following prescriptions:

3. Metoprolol 50 mg, 60 tablets, acquisition cost = \$5.20, Gross profit _____
AWP = \$8.80, selling price = \$11.99
Net profit _____

4. Lisinopril 20 mg, 90 tablets, acquisition cost = \$35.80, Gross profit _____
AWP = \$42.80, selling price = \$45.99
Net profit _____

5. ProAir HFA 8.5 g, acquisition cost = \$37.50, Gross profit _____
AWP = \$40.98, selling price = \$43.50
Net profit _____

6. Amoxicillin 500 mg, 90 capsules, acquisition cost = \$7.80, Gross profit _____
AWP = \$12.80, selling price = \$18.99
Net profit _____

Use the following to answer questions 7-10:

Calculate the retail price of the following prescriptions using the formula AWP + professional fee = retail price of prescription if the professional fee is determined using the following chart:

AWP Professional Fee

less than \$20.00: \$4.00

\$20.01 - \$50.00: \$5.00

Greater than \$50.01: \$6.00

7. ProAir HFA 8.5 gr AWP/8.5 gm \$40.98 retail price _____

8. Guanabenz 4 mg Tabs #30 AWP/100 \$66.20 retail price _____
9. Fluocinolone Cream 0.025% 15 Gm AWP/15 GM \$3.05 retail price _____
10. Amantadine Syrup 4 oz. AWP/PINT \$61.51 retail price _____

Use the following to answer questions 11-14:

Calculate the amount per fill allowable if a third-party plan covers a 34-day supply, adjust the refills and state the days supply for insurance purposes:

11. Hydroxychloroquine 200 mg #100
 2 PO daily
 2 refills
 _____ qty _____ refills _____ partial _____ days supply
12. Humulin N U-100 Insulin 10 ml 3 bottles.
 40 units daily
 2 refills
 _____ qty _____ refills _____ partial _____ days supply
13. Nitrolingual Pumpspray #3
 (200 sprays/container) 1–2 metered doses (400–800 µg) SL.
 May repeat q5 minutes up to a max. = 3 doses/15 min
 2 refills
 _____ qty _____ refills _____ partial _____ days supply
14. Nabumetone 500 mg #100
 1 g p.o. daily
 2 refills
 _____ qty _____ refills _____ partial _____ days supply

Answer Key

- 1.
- 2.
3. \$6.79, \$2.79
4. \$10.19, \$5.19
5. \$6.00, \$1.00
6. \$11.19, \$7.19
7. \$46.98
8. \$23.86
9. \$7.05
10. \$19.38 (*Hint:* $[\$61.51/4] = \$15.38 + \$4.00$ professional fee for less than \$20.00 AWP = \$19.38)
11. 68, 3, 28, 34
12. 1 bottles & 8 refills of 1 bottle
13. 1 box + 8 refills (This is a problem that was added to extend to practical applications in the workplace and only provides the information that is provided by prescribers when they write prescriptions. Nitolingual spray is used to treat acute angina attacks and it is only used occasionally. Because of the nature of the medication, third-party plans would cover one box at a time. If one box would be dispensed at a time because of insurance restrictions, it would be necessary to adjust the refills to 8).
14. 68, 3, 28 (The dose is two tablets per day. 68 tablets would provide a 34 day supply. If 68 tablets would be dispensed per RX, there would be 3 refills of 68 and one partial refill of 28 would remain).

This work is licensed under a Creative Commons 3.0 License <http://creativecommons.org/licenses/by/3.0>



This workforce solution is 100% funded by a grant awarded by the U.S. Department of Labor, Employment and Training Administration, TAACCCT grant agreement # TC-22505-11-60-A-25. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. Massachusetts Community Colleges are equal opportunity employers. Adaptive equipment available upon request for persons with disabilities.