Student Learning Advisory Service

Contact us

Please come and see us if you need any academic advice or guidance.

Canterbury

Our offices are next to Santander Bank

Open

Monday to Friday, 09.00 – 17.00
E: learning@kent.ac.uk
T: 01227 824016

Medway

We are based in room G0-09, in the Gillingham Building and in room DB034, in the Drill Hall Library.

Open

Monday to Friday, 09.00 – 17.00
E: learningmedway@kent.ac.uk
T: 01634 888884

The Student Learning Advisory Service (SLAS) is part of the Unit for the Enhancement of Learning and Teaching (UELT)

Acknowledgments

All materials checked by Dr Scott Wildman, Dr Cleopatra Branch, Jerome Durodie and Andrew Lea, Medway School of Pharmacy, Anson Building, Central Avenue, Chatham Maritime, Chatham, Kent. ME4 4TB.

This leaflet has been produced in conjunction with **sigma** Network for Excellence in Mathematics and Statistics Support

sigma Σ network for excellence in mathematics and statistics support

kent.slas
@unikentSLAS
www.kent.ac.uk/learning

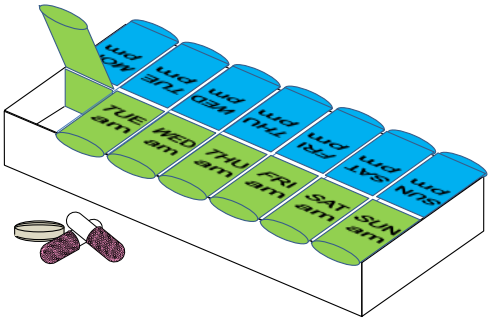
University of Kent | Student Learning Advisory Service

University of Kent | Student Learning Advisory Service

14

AT A GLANCE/ PHARMACY CALCULATIONS PRESCRIPTIONS (1)

Calculating the quantity of tablets/capsules required for a prescription.



Example 1

A patient is prescribed ibuprofen orally, 800mg three times daily for one month. You have 400mg tablets. How many should you supply?

Method

Step 1: Calculate

$2\ (\times 400mg) \times 3\ (\text{times daily}) \times 28\ \text{days} =$ **168 tablets** ✓

NB: in prescribing practice one month is 28 days

Example 2

How many tablets of Drug A will you need for a full supply for the following prescription.?

Drug A tablets 200mg. Use the following dosage regime:

	OM*	ON*
1 Day	200mg	200mg
2 Days	200mg	400mg
3 Days	400mg	400mg
4 weeks	400mg	600mg

***** OM = every morning; ON = every night

Method

Step 1: Convert the amounts into the number of tablets to be taken

$$200mg = 1 \text{ tablet}$$
$$400mg = 2 \text{ tablets}$$
$$600mg = 3 \text{ tablets}$$

Step 2: Calculate the number of tablets for each period

$$1 \text{ day} \times 2 \text{ tablets} = 2 \text{ tablets}$$
$$2 \text{ days} \times 3 \text{ tablets} = 6 \text{ tablets}$$
$$3 \text{ days} \times 4 \text{ tablets} = 12 \text{ tablets}$$
$$28 \text{ days} \times 5 \text{ tablets} = 140 \text{ tablets}$$

Step 3: Add together to calculate the total

$$2 + 6 + 12 + 140 = \mathbf{160 \text{ tablets}}$$ ✓

Example 3

A prescription calls for 1000mg of drug B to be taken daily for 3 months, thereafter to be reduced by 200mg daily to zero over 4 weeks. Assuming drug B is available in 200mg tablets, how many will be needed for a full supply?

Method

Step 1: Convert the amounts into the number of tablets to be taken

$$1000mg = 5 \text{ tablets}, 800mg = 4 \text{ tablets}, \text{etc ...}$$

Step 2: Calculate the number of tablets for each period

$$3 \times 28 \text{ days} \times 5 \text{ tablets} = 420 \text{ tablets}$$

Reduction to zero over 4 weeks:

$$7 \text{ days} \times 4 \text{ tablets} = 28 \text{ tablets}$$
$$7 \text{ days} \times 3 \text{ tablets} = 21 \text{ tablets}$$
$$7 \text{ days} \times 2 \text{ tablets} = 14 \text{ tablets}$$
$$7 \text{ days} \times 1 \text{ tablet} = 7 \text{ tablets}$$

Step 3: Add together to calculate the total

$$420 + 28 + 21 + 14 + 7 = \mathbf{490 \text{ tablets}}$$ ✓

Q1

A patient is prescribed Drug C, two 150mg tablets four times daily for two weeks. How many tablets should you supply?

Q2

You are presented with the following directions on a prescription:

Drug A tablets 100mg. Use the following dosage regime:

	OM*	ON*
3 Days	100mg	100mg
3 Days	100mg	200mg
5 Days	200mg	200mg
6 weeks	200mg	300mg

How many tablets of Drug E will you need for a full supply?

Q3

A prescription calls for 1000mg of drug D to be taken daily for 1 month, thereafter to be reduced by 250mg daily each week to zero. How many 250mg tablets should you supply?

Q4

A patient is prescribed metformin tablets, 500mg twice daily for one week, thereafter to be increased by 500 mg increments daily each week, as tolerated, up to a maximum of 2000mg daily. How many 500mg tablets should you supply for the first month?

Q5

A prescription asks for 10mg of drug F, once daily for 3 months, thereafter to be reduced by 2mg daily each week to zero. You have 2mg capsules in stock; how many should you supply?

Answers

Q1 = 112 tablets. **Q2** = 245 tablets. **Q3** = 154 tablets. **Q4** = 91 tablets. **Q5** = 490 capsules.