

FOR 274 Assignment 1 [40 points]

This assignment should be completed and handed in at the start of the next lab.

1. Using Books or the Internet find the following information for these trees, shrubs, and grasses [10 points]

Common Name	Scientific Name	4-Letter Code
		ABGR
		ABLA
		LAOC
		PIEN
		PIAL
		PICO
		PIMO3
		PIPO
		POTR
		TSHE
		ACGL
		AMAL
		HODI
		PHMA
		SYAL
		BRTE
		FEID
		POPR
		ELSP
		POBU

More questions on next page:

2. Calculate to the nearest $1/10^{\text{th}}$ foot the radius of a 5^{th} , 10^{th} , and 100^{th} acre circular plot [5 points]:

5^{th} calculations:

10^{th} calculations:

100^{th} calculation:

3. Calculate to the nearest 10 cm the radius of a 7^{th} , 12^{th} , and 30^{th} hectare circular plot [5 points]:

7^{th} calculations:

12^{th} calculations:

30^{th} calculation:

4. Using Books or the Internet find the following conversion factors for these common measures [5 points]

English Measure	Conversion Factor	Metric Measure
(0.5pt each)		
1 inch =		centimeters
1 foot =		meters
1 yard =		meters
1 mile =		kilometers
US pints =		litres
1 pound =		kilograms
1 ounce =		grams
1 acre =		hectares
1 sq mile		sq kilometers
English:		English:
(0.5 pts each)		
1 chain =		feet
1 foot =		hands
1 rod (or pole) =		feet
1 furlong =		poles
1 mile =		furlongs
1 league =		miles
2.5 pts:		
Tons per acre =		kilograms per hectare
Fahrenheit =		Celsius

More Questions on Next Page:

5. Use the information on the Combining Errors Handout to answer the following questions:[10 points]

a. The measure of tree biomass of a particular tree was made up of 3 main components:

- The biomass in the foliage = 380 ± 10 kg
- The biomass of the stem = 2100 ± 20 kg
- The biomass of the roots = 1600 ± 60 kg

Calculate the total tree biomass and the total error.

b. Calculate the total area of a rectangular stand if the width was determined by pacing (400 ± 40 feet) and the breadth was determined by analysis of an aerial photograph (200 ± 10 feet)

More Questions on Next Page:

6. Describe, with the aid of a diagram, how without using instruments you might determine the height of a tree from its shadow length [5 points]: