

FOR 274 Assignment 2 [25 points] Name: _____

This assignment should be completed and handed in to the assignment box in the Forest Resources office by noon on Monday 7th September.

NOTICE: Where working is required, *zero credit* will be given if no working is shown.

1. Convert the following measurements as specified [Working required – do not use an online /iphone convertor!]:
 - a. 24 inches to millimeters

 - b. 18 square chains to acres

 - c. 5,000 cu ft per acre to m^3 per ha

 - d. 24,000 kg per ha to grams per m^2

 - e. 200 lbs per ac to kg per ha

 - f. 68 ha to acres

 - g. 4.8 km to ft

 - h. 0.1 acres to hectares

 - i. 563 m^3 per ha to cubic feet per acre

 - j. 23 square miles to km^2

2. Write these numbers in scientific notation:
 - a. 4260

 - b. 38400

 - c. .0258

 - d. .005454

3. Write the equation for determining the radius of a circular plot when the area is known

4. Write the equation for determining the length of the hypotenuse of a right angle triangle

5. Use the "Combining Errors Handout" to answer the following questions [Working required]:
 - 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 kgCalculate 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)