

This homework will give you practice declaring variables, calculating simple expressions, and displaying the values of variables.

Write a complete Java program to calculate the medication dosage for **three different patients**. Your program should start with the weight of each patient in pounds (lbs), so remember to convert the weight to kilograms before calculating dosage! (Hint: 1 pound is equal to 0.45359237 kilograms)

The dosage of the medication is calculated as follows:

**30 mg per kilogram of the patient's weight.**

Important: **Do not declare new variables for each patient being processed.** I want to see that you understand how the same variable can hold different values at different times.

Specifically, the program should:

1. Print a heading for the output.
2. Declare variables for patient's weight in pounds and kilos and dosage
3. Assign a value to the patient's weight in pounds.
4. Evaluate the formula to calculate the patient's weight in kilograms.
5. Evaluate the formula to calculate each patient's dosage for each medication.
6. Print all of the values to the screen, neatly labeled.
7. Do the same for the next two patients.

Sample output:

**Medical Dosage Log:**

**Patient 1:**

**Weight:** 140 lbs

**Converted to kilos:** 63.50 kg

**Required Dosage:** 1905.09 mg

Note: You must use type double for the kilogram weight and dosage.

Remember to use meaningful variable names and include comments for clarity!