# Homework due September 18 at 6pm (20 points)

This homework assignment asks you to create your git repository that you'll use to store and manage your work this semester. It also asks you to write a program that includes functions. Finally, it asks you to use the javadoc tool to create documentation for your code.

1. Create a local repository and linked GitHub repository to house your work for the semester. Call it lastname\_firstname\_cpsc24500 (where you substitute your last name and first name). Use a .gitignore that is nearly identical to the long .gitignore sample I placed in the in-class notes folder for week 1, but comment out the Eclipse section so that Eclipse's project setup files will be included in the repository. Post the link to the Github repository as the homework submission. (5 points)
2. Write a program called CircleCalc.java that calculates and prints the area and circumference of a circle or random radius. The program should randomly generate the radius and then call functions to compute the circles' area and circumference. It should print the area and circumference to the screen. Include Javadoc comments for the class as well as for the functions of the class. Commit your code to the local and Github repositories. (6 points)
3. Use the javadoc tool to create documentation for the CircleCalc program you wrote in #2. Save the documentation to a folder called circle\_docs. Include circle\_docs in the local and remote Github repository. (4 points)
4. Suppose you want to cover an area of your house with laminate flooring. Each board is 30 inches long and 6 inches wide. The boards come packaged in boxes of six. Each package costs $24.99. The dimensions of your room are shown in this diagram. Because you will have to cut the boards to accommodate the angle, there will be some waste, so you will have to purchase 20% extra flooring to account for that. Also, you can't buy individual boards, as you can purchase them only in boxes of six. Write a program called Flooring.java that will determine and print how many packages of laminate boards you will need to buy and what that will cost. Use at least one function other than main. Add this to your GitHub repository. (5 points)

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