Project 2

Liberal Arts Mathematics

# Introduction

For this project, we are going to calculate how much paint to buy for a room. This project will summarize several topics from Chapter 9. Directions for submitting your project are at the end.

# Setup

For this project, you will need to start by collecting some information.

1. Find a room in your home to measure. Sketch the floor plan of the room.
2. Measure the height of the room from floor to ceiling. Round your answer to the nearest tenth of a foot. (If the height is 7 ft. 11 in., divide . Round the decimal part to and write the measurement as .)
3. Measure the length of each wall. Round each measurement to the nearest tenth of a foot the same as part 2.
4. Visit the website of a hardware or paint store. Find a gallon can of any type of interior wall paint. Record the following information:
   1. The brand and description of the paint. (e.g. Valspar Reserve Flat)
   2. The price for the gallon can.
   3. The maximum coverage area in square feet.
5. On the same website, find a gallon can of any type of interior ceiling paint. Record the following information:
   1. The brand and description of the paint. (e.g. Valspar Reserve Flat)
   2. The price for the gallon can.
   3. The maximum coverage area in square feet.

# Making Sense of the Numbers

1. Calculate the area of the ceiling of the room. Use your sketch of the floorplan to help break a complex room into smaller shapes. Round your answer to the nearest square foot. (See Section 9.3 for help.)
2. Calculate how many gallons of paint to use for the ceiling. Round your answer **up** to the nearest whole gallon. (Use the information from part 5 above to answer the question.)
3. Calculate the cost to paint the ceiling.
4. Calculate the area of each wall of the room. Add the area of each wall together. Round your answer to the nearest square foot. (See Section 9.3 for help.)
5. Calculate how many gallons of paint to use for the walls. Round your answer **up** to the nearest whole gallon. (Use the information from part 4 above to answer the question.)
6. Calculate the cost of paint the walls.
7. Calculate the volume of the room. Round your answer to the neatest cubic foot. (See Section 9.4 for help.)

# Directions for Submitting Your Project

You may print this document and write your answers on it directly or work on your own notebook. Either way, scan your work as a single PDF document and e-mail the document to me. When deciding how much work to show, think of me as a person who does not believe you and you must convince me of the correct answer.

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