



Compound areas of two dimensional figures

Standard: Calculate area

Estimate amount of material needed for project.

Task:

1.

A) You are planning to paint your room. The walls are 7 ft tall and the room dimensions are 10 ft by 15 ft. Calculate the area of the surface that will be painted.

B) One gallon of paint covers about 75 square feet. How many gallons of paint would you need to buy to paint the room?

2.

A) You are planning to tile the floor in the kitchen. The kitchen is 12 feet by 10 feet with a little pantry that is 3 by 4 feet in dimensions. Draw the diagram of the kitchen and the pantry. Find the area you will need to tile.

B) The tile that you like is 6 inches by 6 inches. And come in a box of 20. How many boxes do you need to complete the project?

3.

A) You are improving the landscape around your house. You are planning to put fresh mulch in the flowerbed and the vegetable garden. The rectangular vegetable garden in the back of the house is 20 feet long and 15 feet wide. Draw the diagram of the garden and find its area.

B) The flower bed in front of the house is shaped as semicircle with diameter of 20 ft. Draw the diagram of the front flower bed and find its area.

C) If one bag of mulch covers about 40 square feet of ground, how many bags of mulch do you need to buy to cove the flower bed and the vegetable garden?

	<i>10-8*</i>	<i>7-4*</i>	<i>4-1*</i>	<i>0</i>
Calculate area	<i>All the areas are calculated correctly</i>	<i>Three or two areas are found correctly</i>	<i>Only one area is found correctly</i>	<i>None of the areas are found correctly.</i>
The amount of material is estimated correctly	<i>The materials estimated correctly for all projects</i>	<i>Two projects have the correct estimates</i>	<i>One project has correct estimate</i>	<i>None of the projects have the correct estimates of the materials needed.</i>

*Partial credit points are given for showing correct steps and calculations.