

Name \_\_\_\_\_

Due Date \_\_\_\_\_

Points Possible 10 (+ 4 ec)

Show ALL your work (**neatly**) on a separate sheet of paper and attach this as a cover sheet for full credit.

/2	1. What is the scale for the attached plans?
/2	2. How many square inches of material will you need for the project?
/3	3. Gingerbread dough needs to be rolled to a thickness of $\frac{1}{3}$ inch to be sturdy enough for a project like this. What volume of gingerbread dough will you need (in cubic inches)? In cups? <i>1 cup = 14.4 cubic inches</i>
	4. Assuming you will have 20% material waste, what volume of dough will you need?
/3	5. I've got the following recipe for gingerbread. How many cups of dough will it make? Do I need to scale the recipe up or down? If so, by how much? 1 egg = 2 tablespoons 3 teaspoons = 1 tablespoon 16 tablespoons = 1 cup  <b>Joy of Cooking Gingerbread</b> 6 cups flour $\frac{1}{2}$ t baking powder 4 teaspoons ginger 4 teaspoons cinnamon $\frac{1}{2}$ teaspoon cloves $\frac{1}{2}$ teaspoon salt 12 tablespoons butter 1.5 cups brown sugar 2 eggs 1 cup molasses 1 tablespoon water
/4	6. You'll need frosting for the following applications: a. $\frac{1}{4}$ inch spread evenly on roof b. Pipe along all attached sides. This frosting "glue" will be applied in the shape of a cylinder with diameter $\frac{1}{8}$ inch.  What is the total volume of frosting you will need in cubic inches? In cups? What is the total volume of frosting needed if you experience 20% waste?

