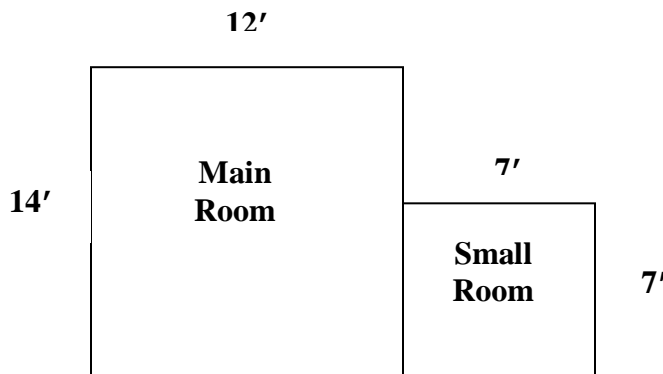


Mrs. Horn's Recreation Room

Mrs. Horn is a wealthy lady in your town. She has asked several designers (you!) to submit proposals for how to cover her recreation room floor with an interesting vinyl tile design. She expects a letter from each design team stating why their design should be chosen, a sketch of the design, and a total cost for the tiles. Installation will be paid for separately. She will donate \$200.00 to the End-of-Year Celebration if she uses one of the designs submitted.

She supplied the following information:

- Vinyl tiles cost \$0.82 each.
- Tiles only come in boxes of 45 tiles of the same color.
- The tiles are 12" x 12" each.
- Tiles may be cut once on the diagonal in order to make interesting designs.
- Mrs. Horn's favorite colors are blue, green, and yellow.
- The dimensions of the main room are 12' x 14'. There is a smaller room that she also wants to be tiled that is 7' x 7'.
- Mrs. Horn sent this sketch with her information:



1. Discuss the task with your partner to be certain you understand what Mrs. Horn wants. Think about the mathematics you know that will help you.
2. With your partner experiment with different possible designs (graph paper might be helpful). Remember how the tiles are sold.
3. Decide on a design and prepare a proposal for Mrs. Horn. Be sure to include all of the things she asked for, including the cost of using your design, and reasons why she should choose your design.