

## Problem of the Day

Barney and Betty are making brownies. The recipe they are using calls for four eggs. They have only two eggs, so they have decided to make half the recipe.

### Brownie Recipe

4 squares unsweetened chocolate (4 ounces)

2/3 cups shortening

2 cups sugar

4 eggs

1 teaspoon vanilla.

1 1/4 cups all-purpose flour

1 teaspoon baking powder

1 teaspoon salt

1 cup chopped nuts

Heat oven at 350 degrees. Grease a 13 x 9 x 2-inch oblong pan. Melt chocolate and shortening in a saucepan over low heat. Beat in sugar, eggs, and vanilla. In a separate bowl, stir together flour, baking powder, and salt; blend into chocolate mixture. Mix in nuts. Spread in pan. Bake 30 minutes or until brownies pull away from sides of pan. Do not over bake. Cool slightly and cut into squares.

How much of each ingredient will Barney and Betty need to make half the recipe? If they bake the brownies in an 8 x 8 x 2-inch pan, will the brownies be thicker or thinner than those in the original recipe? Use pictures, words, numbers, or symbols to record your work and explain your reasoning.

Extension: Clarence and Cleo are also making brownies, but they have only one egg. If they decide to use this recipe, how much of each ingredient will they need? If they bake their brownies in a 3 1/2 x 7 1/2-inch loaf pan, how will the thickness of their brownies compare with the thickness of those made in the pan size specified in the original recipe? How will the thickness of Clarence and Cleo's brownies compare with the thickness of Barney and Betty's brownies?