

Math Challenge #5



First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	

Baking and Cooking

Welcome to Math Challenge #5. Math is a very important part of cooking. We come across with math in many aspects of cooking and baking, including changing the quantities of ingredients when you want to make more than one batch, figuring out cooking times based on weight and converting temperature from Celsius to Fahrenheit (and vice versa).

In this challenge, we solve math problems in cooking and baking. Enjoy the challenge!

Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 7 problems.
Fourth Grade and above: solve at least 12 problems.

Answer

1.	Sandra and Hameed ate 2 cookies each, Bella ate 1 cookie and Tarek ate 3 cookies. How many cookies did they eat altogether?	
2.	 Grandma Sue brought a pecan pie to a Thanksgiving dinner. The pie had 8 slices. If we ate all but 2 slices of pie, how many slices did we eat?	
3.	To make a batch of oatmeal cookies, Ben needs 3 cups of old fashioned oats. How many cups of oats will he need to make 3 batches of oatmeal cookies? 	
4.	 Trisha is going to make Cranberry Oatmeal Cookies. She got a recipe from Chef Kathy. She has all the 14 ingredients except for baking soda, cinnamon, brown sugar, vanilla extract, coconut flakes and dried cranberries. How many ingredients she is missing?	
5.	Tara shared the three dozen cookies with her neighbors. She gave a dozen to Mr. Goo and gave 10 cookies to Mrs. Cauthorn. She then kept the rest because 4 of her friends are coming over later to play and she plans to share cookies with them. 	<p><i>a.</i></p> <p><i>b.</i></p>
	<p style="margin-left: 40px;">a. How many cookies did she give away?</p> <p style="margin-left: 40px;">b. How many cookies does she have left to share with her friends?</p>	

6. Lisa brought 2 trays of cookies (like in the picture) to school. Her class, when including herself, has 26 students in it. Lisa's teacher and her class each ate one cookie. If at the end of the day, there were 15 cookies left, how many students were absent?



7. Mr. Koh baked 30 dinner rolls for a family dinner. The number of adults at dinner was exactly the same as the number of children. Each adult ate 2 rolls, and each child ate 1 roll. If there were 3 dinner rolls left, how many children were at dinner?

8.  A recipe for Marshmallow Popcorn Balls calls for $\frac{1}{2}$ cup popcorn (unpopped), 1 tablespoon vegetable oil, 6 tablespoons butter, and 5 cups miniature marshmallows.

a. Jackson wants to make these treats and has all the ingredients except the right size of marshmallow. He has only regular size marshmallows. How many regular size marshmallows does he need to make a batch of these treats?



b. Meera also wants to make these yummy treats. She has jars of marshmallow fluff. Each jar contains about $2\frac{1}{2}$ cups of marshmallow fluff. How many jars will she need to make a batch of these treats?

9.  Shaunna needed $\frac{1}{3}$ cup of flour to make 1 pumpkin pie. If she made 9 pumpkin pies, how many cups of flour would Shaunna need?

10. A cinnamon roll cake calls for $\frac{3}{4}$ cup of sugar for the cake, $\frac{2}{3}$ cup of sugar for the cinnamon filling, and $1\frac{1}{2}$ cups of sugar for the glaze. How many cups of sugar are needed to make this cinnamon roll cake? Express your answer as a mixed number.

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<p>11. A pastry chef bought 3.5 kilograms of carrots to make carrot cakes. Each large carrot cake needs 300 grams of carrots. A small size carrot cake needs 240 grams of carrots. If he makes 7 large carrot cakes, how many small carrot cakes can he make without having to go buy more carrots? 1 kilogram = 1000 grams.</p>		
<p>12. Nicole baked 3 batches of chocolate chip cookies.</p> <p>a. She used one-third of a bag of chocolate chips to make all of the cookies. How much of the bag did she use for each batch?</p> <p>b. She then used half of the leftover chocolate chips to bake some muffins. If there are 12 ounces (oz.) of chocolate chips in a bag, how many oz. of chocolate chips are not used?</p>	 	<p>a.</p> <p>b.</p>
<p>13. Keisha cooked 4 pounds of mashed potatoes for a dinner party. The guests only ate two-thirds of the amount she cooked. How much, in pounds, of mashed potatoes did they eat? Express your answer as a mixed number.</p>		
<p>14. Tanisha's family will be having a turkey dinner. She bought a 16-pound (lb.) turkey.</p> <p>a. If the cost of the turkey is \$1.28 per pound, how much did she pay for the 16 lb. turkey?</p> <p>b. Tanisha is calculating the time and temperature to bake the turkey. She was told to cook 13 minutes per pound at 350 degrees Fahrenheit. How long should she bake the turkey? Express your answer in hours and minutes (for example, 1 hour 10 minutes).</p>		<p>a.</p> <p>b.</p>
<p>15. Emma wants to make the famous Chef Kathy chocolate chip cookies, but she doesn't have the right measuring tools. All she has are tablespoons. Help Emma convert the ingredients into tablespoons.</p> <p>1 cup = 16 tablespoons</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>1 $\frac{1}{4}$ cups all-purpose flour $\frac{1}{2}$ cup packed light brown sugar $\frac{1}{2}$ cup butter, softened $\frac{1}{4}$ cup sugar $\frac{1}{2}$ cup chopped walnuts</p> </div>		<p>___ TBS all-purpose flour</p> <p>___ TBS light brown sugar</p> <p>___ TBS butter</p> <p>___ TBS sugar</p> <p>___ TBS chopped walnuts</p>

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<p>16. Chandria wanted to bake three pies for her family. One pie crust calls for 2.5 cups of flour. The filling calls for 4 tablespoons of flour. How many cups of flour will she need to bake the 3 pies? Express your answer as a mixed number. 1 cup = 16 tablespoons</p>	
<p>17. The Sarwono family always order their Thanksgiving dinner. This year they ordered a baked ham, butternut squash soup, and cornbread. The 8.5 lbs. ham cost \$10.50 per pound. The butternut squash soup is \$24.95 and the cornbread cost \$9.95. How much did they spend on dinner?</p>	
<p>18. McDouglas Restaurant sells milkshakes in two sizes. A small milkshake contains 300 milliliters, and a large milkshake contains $\frac{2}{3}$ more.</p> <p>a. How many milliliters does a large milkshake contain?</p> <p>b. If Mr. McDouglas drinks $\frac{2}{3}$ of a small milkshake and Miss Clark drinks $\frac{1}{2}$ of a large milkshake, who drinks the most?</p>	

Solution is available on December 9, 2022
www.mathinaction.org