

# Kitchen Math Equivalents & Conversions

In the kitchen ratios are used as a type of measurement that compare one amount to another amount.

**EXAMPLE:** Two slices of bread will make 1 sandwich. The ratio of slices to sandwiches is 2 to 1. The fraction  $2/1$  names this ratio.

**Problem:** Carlos wants to make 8 sandwiches. How many slices of bread are needed?

**Set up the ratio:** 2 slices for 1 sandwich: \_\_\_\_\_ slices for 8 sandwiches

$2/1 = \underline{\quad}/8$  Make the fractions equivalent (equal)

## Ratios

*Make these fractions equivalent (equal):*

1.  $\frac{1}{2} = \underline{\quad}/6$

4.  $2/2 = 4/\underline{\quad}$

2.  $\frac{3}{4} = \underline{\quad}/8$

5.  $2/3 = 10/\underline{\quad}$

3.  $1/3 = \underline{\quad}/9$

6.  $1/5 = 2/\underline{\quad}$

*Calculate the following:*

7. Four ounces of cheddar cheese makes 1 cup of shredded cheese. The recipe calls for 3 cups of shredded cheese. How many ounces of cheese must be shredded?

Ratio \_\_\_\_\_ to \_\_\_\_\_ Fraction  $\underline{\quad}/\underline{\quad} = \underline{\quad}/\underline{\quad}$  Answer \_\_\_\_\_ oz.

8. One pound of fettucinie makes 5 cups cooked. How many cups will 3 pounds make?

Ratio \_\_\_\_\_ to \_\_\_\_\_ Fraction  $\underline{\quad}/\underline{\quad} = \underline{\quad}/\underline{\quad}$  Answer \_\_\_\_\_ cups

9. Two stalks of celery make 1 cup of chopped celery. The soup recipe requires 6 stalks of celery. How many cups of chopped celery will this make?

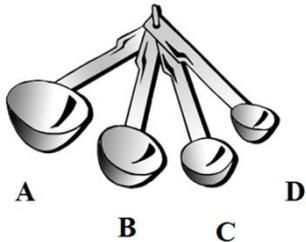
Ratio \_\_\_\_\_ to \_\_\_\_\_ Fraction  $\underline{\quad}/\underline{\quad} = \underline{\quad}/\underline{\quad}$  Answer \_\_\_\_\_ cups

10. Gina squeezed an orange and got 4 ounces of orange juice. She needs 32 ounces of juice for her family. How many oranges does she need?

Ratio \_\_\_\_\_ to \_\_\_\_\_ Fraction  $\underline{\quad}/\underline{\quad} = \underline{\quad}/\underline{\quad}$  Answer \_\_\_\_\_ oranges

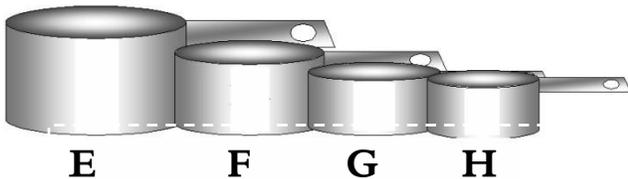
## Measurement Tools & Conversions

11. Write in the four sizes usually found in a set of measuring spoons.



- a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_  
 d. \_\_\_\_\_

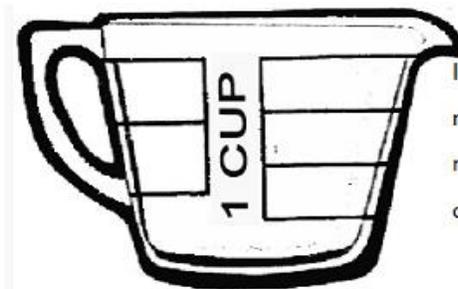
12. Write the four sizes usually found in a set of dry measuring cups.



- e. \_\_\_\_\_  
 f. \_\_\_\_\_  
 g. \_\_\_\_\_  
 h. \_\_\_\_\_

13. Write the cup and ounce equivalents in a liquid measuring cup.

- i. \_\_\_\_\_  
 j. \_\_\_\_\_  
 k. \_\_\_\_\_



- l. \_\_\_\_\_ oz  
 m. \_\_\_\_\_ oz  
 n. \_\_\_\_\_ oz  
 o. \_\_\_\_\_ oz

14. Circle the largest amount.

e. 1 tablespoon

f. 1 teaspoon

15. Circle the amount equal to one tablespoon.

g.  $\frac{1}{4}$  cup

h. 4 teaspoons

i. 3 teaspoons

16. You want to make half a recipe of cookies. The original recipe calls for 1 Tbsp. baking soda.

Using the measuring spoons labeled in question 1, circle the ones you would use.

j. About  $\frac{1}{2}$  of A

k. 1 of both A & C

l. 2 of C

m. 1 of both C & B

17. Circle the largest amount in each set.

n.  $\frac{3}{4}$  cup

o.  $\frac{1}{4}$  cup

p. 2 tablespoons

18. Circle the number of tablespoons that equals 1 c.

q. 8 Tbsp.

r. 16 Tbsp.

s. 4 Tbsp.

t. 32 Tbsp.

19. Circle the smallest amount.

u.  $\frac{1}{3}$  cup

v. 4 Tbsp.

Name: \_\_\_\_\_ Period: \_\_\_\_\_

20. In the blanks below, put the letter from the labeled measuring tools (in question 11, 12, & 13) indicating the measuring device you would use to measure:

- |  |   |
|--|---|
| a. _____ 2 teaspoons sugar                 | h. _____ $\frac{1}{2}$ cup brown sugar    |
| b. _____ $\frac{2}{3}$ cup chocolate chips | i. _____ 1 cup peanut butter              |
| c. _____ 1 cup rice                        | j. _____ $\frac{1}{4}$ cup powdered sugar |
| d. _____ 3 tablespoons shortening          | k. _____ 2 tablespoons water              |
| e. _____ $\frac{1}{2}$ cup milk            | l. _____ 1 cup mashed banana              |
| f. _____ 1 teaspoon cinnamon               | m. _____ 1 cup chopped walnuts            |
| g. _____ $\frac{1}{4}$ cup corn syrup      |   |

21. Your recipe calls for  $\frac{3}{4}$  cup sugar. There is no  $\frac{3}{4}$  cup measure. What measuring cups would you use to measure? \_\_\_\_\_

22. You are doubling your recipe. The original recipe calls for  $\frac{3}{4}$  cup flour. What dry measuring cups would you use to measure? \_\_\_\_\_

23. Fill in this chart on butter or margarine:

- 1 pound butter = \_\_\_\_\_ sticks = \_\_\_\_\_ cups
- 1 stick butter = \_\_\_\_\_ cup = \_\_\_\_\_ pound
- 1 stick butter = \_\_\_\_\_ tablespoons
- 1 cup butter = \_\_\_\_\_ sticks

24. A recipe calls for 4 tablespoons butter. Describe the best way to measure that:

25. Divide each ingredient in half:

- |  |                                  |
|--|----------------------------------|
| a. _____ $\frac{1}{2}$ cups flour      | f. _____ $\frac{1}{2}$ tsp. soda |
| b. _____ 1 cup shortening              | g. _____ 1 tsp. cinnamon         |
| c. _____ $\frac{1}{2}$ cup brown sugar | h. _____ 1 quart water           |
| d. _____ 1 cup sugar                   | i. _____ $\frac{1}{2}$ cup sugar |
| e. _____ 1 Tbsp. oil                   |                                  |

26. Double each ingredient:

- |                                 |                                  |
|---------------------------------|----------------------------------|
| a. _____ 1 cup flour            | c. _____ 2 Tbsp. sugar           |
| b. _____ $\frac{3}{4}$ cup milk | d. _____ $\frac{1}{2}$ tsp. salt |

27. Calculate the following equivalents:

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| a. 12 tablespoons = _____ cup         | d. 4 ounces = _____ Tbsp.          |
| b. $1\frac{1}{2}$ cups = _____ ounces | e. $\frac{1}{8}$ cup = _____ Tbsp. |
| c. $1\frac{1}{2}$ quarts = _____ cups | f. $\frac{1}{4}$ cup = _____ Tbsp. |