LESSON MAKER PRO

# Share It as Fractions

*Use fractions to show equal sharing.*

**GRADE 4 · 4.NS.3.g**

**4.NS.3.g** "Represent the division of two whole numbers as a fraction given a contextual situation and a model (e.g., 3/5 means the same as 3 divided by 5 or 3/5 represents the amount of muffin each of five children will receive when sharing three muffins equally)."

NAME _____ DATE _____

## DIVISION AS A FRACTION

A fraction can show a division problem. Put the amount being shared on top and the number of equal shares on the bottom.

## WORKED EXAMPLE

Nine liters of juice are shared equally by 2 teams. Write the amount each team receives as a fraction.

1. Start with 9 liters shared by 2 teams.
2. Write the division: 9 divided by 2.
3. Write the division as a fraction: 9/2.

**Answer: Each team receives 9/2 liter of juice.**

## PRACTICE 6 problems

**1** Write 3 divided by 5 as a fraction.

**ANSWER** _____

**2** What division expression does 8/7 represent?

**ANSWER** _____

**3** Six fruit bars are shared equally by 4 students. Write the amount each student receives as a fraction.

**ANSWER** _____

**4** Write 11 divided by 3 as a fraction.

**ANSWER** _____

**5** What division expression does 12/5 represent?

**ANSWER** _____

**6** Fifteen meters of yarn are shared equally among 8 art tables. Write the amount each table receives as a fraction.

**ANSWER** _____

## APPLY IT Show your work

**1** Fourteen meters of friendship-bracelet cord are shared equally by 3 friends. What fraction of a meter of cord does each friend receive?

WORK SPACE

**ANSWER** _____

**2** A gaming club pours 13 liters of lemonade equally into 4 coolers. What fraction of a liter of lemonade goes into each cooler?

WORK SPACE

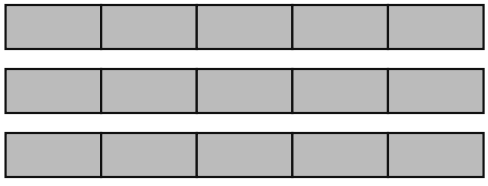
**ANSWER** _____

**3** Three identical fruit bars are shared equally among five students. In the model, each row is one whole fruit bar cut into equal pieces. Give each student one piece from each row. Use the model to find the total number of whole bars and the number of equal shares. Write the division expression and the fraction of one bar each student receives. Explain how the pieces show your fraction.

**Bar 1**

**Bar 2**

**Bar 3**



**ANSWER** _____

## CHALLENGE One step up

A 16-meter roll of fabric is cut into 6 equal pieces. Jalen writes that each piece is 6/16 meter. Is Jalen correct? Explain, then write the correct fraction.

WORK SPACE AND ANSWER

**ANSWER KEY**

# Share It as Fractions

**GRADE 4 · 4.NS.3.g**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | Write 3 divided by 5 as a fraction. | **3/5** |
| 2 | What division expression does 8/7 represent? | **8 divided by 7** |
| 3 | Six fruit bars are shared equally by 4 students. Write the amount each student receives as a fraction. | **6/4 fruit bar** |
| 4 | Write 11 divided by 3 as a fraction. | **11/3** |
| 5 | What division expression does 12/5 represent? | **12 divided by 5** |
| 6 | Fifteen meters of yarn are shared equally among 8 art tables. Write the amount each table receives as a fraction. | **15/8 meter of yarn** |

## PART 2 · APPLY IT

1. **14/3 meter of cord** Write the total amount, 14, as the numerator. Write the number of friends, 3, as the denominator.
2. **13/4 liter of lemonade** The 13 liters are the amount being shared, so 13 goes on top. The 4 coolers are the equal shares, so 4 goes on the bottom.
3. **3 ÷ 5 = 3/5; each student receives 3/5 of one fruit bar.** The model shows 3 whole bars, each cut into 5 equal fifths. There are 15 fifth-size pieces. Each of 5 students receives one fifth from each bar: 1/5 + 1/5 + 1/5 = 3/5 of a bar. Check the learner connects the actual model to 3 total bars and 5 equal recipients, not 15 whole bars.

## CHALLENGE

**No. The 16 meters being shared goes on top, and the 6 equal pieces goes on the bottom. Each piece is 16/6 meter.**

Accept direct fractions with the dividend as the numerator and the divisor as the denominator. Equivalent fractions are correct, but simplification is not required; accept words or a division sign for division expressions. In Apply 3, require a model-based explanation of the three fifth-size pieces in each student share.

# Share It as Fractions



**Apply 3: one student gets the shaded fifth from each of three bars: 1/5 + 1/5 + 1/5 = 3/5 of one bar.**

