

4.2a

Write Fractions

Objectives

- ◆ Understand fractional notation.
- ◆ Identify fractions of a whole.
- ◆ Read and write fractions of a whole.

Vocabulary

- ◆ Third
- ◆ Fifth
- ◆ Sixth
- ◆ Seventh
- ◆ Eighth
- ◆ Ninth
- ◆ Tenth
- ◆ Eleventh
- ◆ Twelfth

Note

This lesson focuses on writing a fraction given a pictorial representation. The next lesson will focus on interpreting the fraction by having students model a written fraction.

Repeat any part of this lesson with shapes other than paper strips or circles as time permits. Students do need to realize that the whole can be any shape or object or thing. Regular shapes such as circles, squares, and rectangles are easier to divide into equal parts. Discuss ways fractions are used in everyday language.

Fractions other than halves or fourths

Provide students with 4 paper strips. These can be made by simply folding a sheet of paper in half and half again along the length to make 4 strips. Students could cut their own strips. Tell them that each strip is a whole. Each whole is the same. Have them fold one strip into halves and another into fourths, color one part, and write the fraction. Then have them use a third strip, fold it in half, fold that in half, and fold again in half, then unfold. Have them draw lines at the folds and color one part, and ask them how they could write the fraction and ideas on how to read it. Then tell

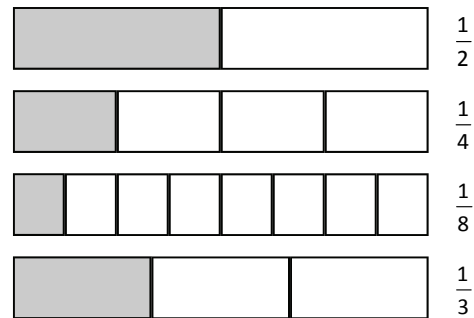
them since it is one part out of 8 equal parts it is written $\frac{1}{8}$ and read as “one eighth.” You can show them how to fold another strip into three equal parts by bending the paper strip into a tube so that the overlap is equal and then creasing. Ask them to color one part and again discuss how to write the fraction and what to call it. They might see the connection to ordinal numbers (first, second, third, fourth, etc.) and name it “one third.” Tell them all of these are fractions, and except for one half, are named the same ways as a position in line. The number on the bottom is the number of equal parts.

List the unit fractions through one twelfth and have students read them out loud.

Ask students to select their strip showing thirds and color in another part. Ask them how many thirds are now colored and ask for suggestions on how we can say what fraction of the whole is colored. Since with $\frac{1}{3}$ the 1 on top told us that it was one part out of 3, we would now write a 2 on top to show that we now have 2 parts out of 3. The number on top counts the number of parts.

Write the fraction and read it: $\frac{2}{3}$ is “two thirds.”

Have students select their strip showing eighths and to color in 4 more parts so that there are now 5 parts colored, and discuss writing and naming the fraction that is colored.



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|----------------------------------|------------------------------------|
| $\frac{1}{2}$ one half | $\frac{1}{8}$ one eighth |
| $\frac{1}{3}$ one third | $\frac{1}{9}$ one ninth |
| $\frac{1}{4}$ one fourth | $\frac{1}{10}$ one tenth |
| $\frac{1}{5}$ one fifth | $\frac{1}{11}$ one eleventh |
| $\frac{1}{6}$ one sixth | $\frac{1}{12}$ one twelfth |
| $\frac{1}{7}$ one seventh | |

