Lesson 13B

Whole Numbers, Mixed Numbers, and Improper Fractions



Prerequisite: Identify Equivalent Fractions, Improper Fractions, and Mixed Numbers

Study the example showing how to identify equivalent fractions. Then solve problems 1–7.

Example

Sherry uses 3 sections of a dark chocolate bar to make a cake. She needs the same amount of white chocolate for the icing. How many pieces of white chocolate will she use?



3 pieces of dark chocolate equals 6 pieces of white chocolate.



Sherry will use 6 pieces of white chocolate.

What fraction of the white chocolate is 6 pieces?

2 What fraction of the dark chocolate bar is 3 pieces?

3 Are the fractions you found in problems 1 and 2 equal? Explain.



improper fraction a

fraction with a numerator greater than or equal to the denominator.

mixed number a number that has a whole-number part and a fraction part, such as $1\frac{1}{2}$.

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Use the model for problems 4 and 5.



- 4 You use $\frac{2}{3}$ of the dark chocolate bar. What fraction names an equal amount of the white chocolate bar?
- 5 One whole dark chocolate bar is $\frac{3}{3}$. What equivalent fraction names one whole white chocolate bar?
- **6** Draw a model that shows $\frac{5}{5}$.



Write a Whole Number as a Fraction

Study the example showing how to write a whole number as a fraction. Then solve problems 1–7.



 Look at the example above. Count the number of equal parts in 1 whole wheel of cheese. What fraction names the whole? _____

- 2 How many equal parts are there in 2 whole wheels of cheese? Explain how you know.
- Write a fraction to show the number of parts in 2 whole wheels.

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Use the number line to answer questions 4 and 5.



7 Draw a model to show $5 = \frac{15}{3}$.

Write a Whole Number as a Fraction

Study the example showing how to write a whole number as a fraction. Then solve problems 1–6.



1 Use the number line below. Circle the fraction that is the equivalent of 2.



2 Use the number line above. What fraction is equivalent to 5? _____

3 Explain why you write 5 as $\frac{5}{1}$.

4 Look at the number line. What fraction is equivalent to 2? Explain how you know.



6 Look at the model. Count the number of diamonds. What is the equivalent fraction for all the diamonds?



Write a Mixed Number as an Improper Fraction.

Study the example showing how to write a mixed number as an improper fraction. Then solve problems 1–7.





7 Write the mixed number that is equivalent to $\frac{8}{3}$. Explain how you know.

Name:

Write Mixed Numbers and Improper Fractions

Solve the problems.





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