

Lesson 3-6

# Adding and Subtracting Unlike Fractions



### ISG Interactive Study Guide

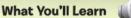
See pages 63-64 for:

- Getting Started
- · Real-World Link
- Notes



### Essential Question

What happens when you add, subtract, multiply, and divide rational numbers?



- Add unlike fractions.
- · Subtract unlike fractions.



### Real-World Link

**Climate** The Sahara Desert covers almost eleven countries, fully or partially. It is one of the driest places in the world, receiving only a couple of inches of rainfall each year.



## Common Core State Standards

**Content Standards** 7.NS.1, 7.NS.1d, 7.NS.3, 7.EE.3

Mathematical **Practices** 1, 3, 4



## Vocabulary

unlike fractions





## multiple of the denominators to rename the fractions before adding them.

Key Concept Add Unlike Fractions

 $\frac{2}{3} + \frac{1}{2} = \frac{2}{3} \cdot \frac{2}{2} + \frac{1}{2} \cdot \frac{3}{3}$ 

 $=\frac{4}{6}+\frac{3}{6}$ 

 $=\frac{7}{6}$  or  $1\frac{1}{6}$ 



## Unlike fractions are fractions with different denominators. Use the least common

Words

Symbols

## Example 1



$$\frac{3}{5} + \frac{1}{3} = \frac{3}{5} \cdot \frac{3}{3} + \frac{1}{3} \cdot \frac{5}{5}$$
$$= \frac{9}{15} + \frac{5}{15}$$
$$= \frac{14}{15}$$

Check for Reasonableness 1 √

Estimate 1+0=1

To add fractions with unlike denominators, rename the fractions with a

common denominator. Then add and simplify as with like fractions.



Rename each fraction with the common denominator.

Add the numerators.

3+4=14

## Got It? Do these problems to find out.

## Find each sum. Write in simplest form.

$$(1a.)\frac{1}{6} + \frac{3}{4}$$

1c. 
$$\frac{2}{5} + \frac{3}{10}$$

$$(1b.)\frac{2}{7} + \frac{3}{14}$$

1d. 
$$\frac{3}{8} + \frac{5}{24}$$



