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Introduction

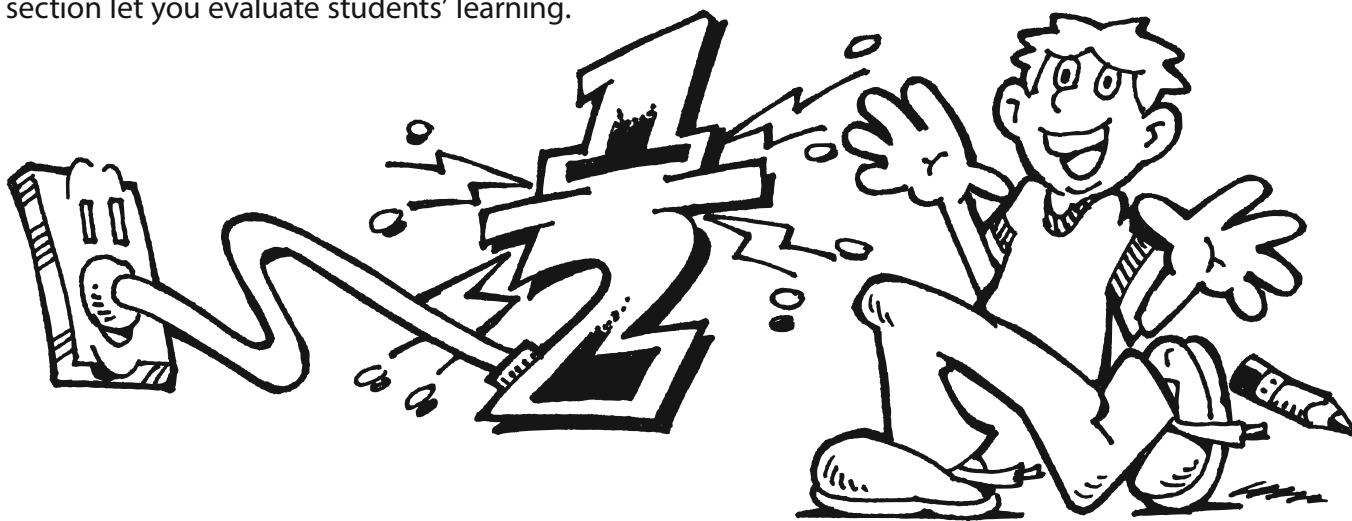
Fractions and Decimals 5–6 contains ready-to-use activity pages to provide your students with skill practice. The activities can be used to supplement and enhance what your students are already learning at school. Give an activity page to students as independent class work, or send the pages home as homework to reinforce skills taught in class. An answer key is included at the end of the book for verification of student responses.

This book provides activities that will directly assist students in practicing basic skills and concepts. The structure of the book enhances students' learning and enables them to meet new challenges with confidence. The book is divided into two sections: the first section features fractions; the second presents decimals. The activity pages in the book introduce skills in an orderly progression to ensure students' success. Many of the pages also provide problem-solving activities that allow students to apply what they have learned and to practice critical-thinking skills. In addition, review pages at the end of each section let you evaluate students' learning.

Students will receive reinforcement in the following skills:

- ✍ Comparing fractions
- ✍ Adding and subtracting fractions
- ✍ Adding and subtracting mixed numbers
- ✍ Multiplying and dividing fractions
- ✍ Finding the least common denominator
- ✍ Comparing decimals
- ✍ Rounding decimals
- ✍ Adding and subtracting decimals
- ✍ Multiplying and dividing decimals
- ✍ Converting fractions to decimals

Use *Fractions and Decimals 5–6* to reinforce or extend concepts and skills. "Recharge" skill review with the ready-to-go activities in this book, and give students the power to succeed!


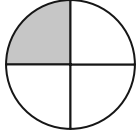
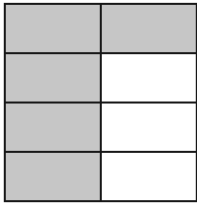
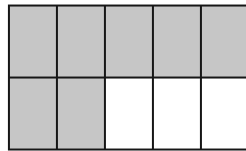
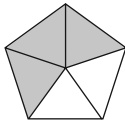
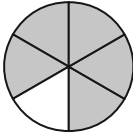
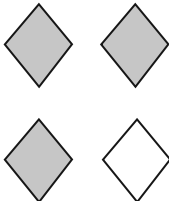
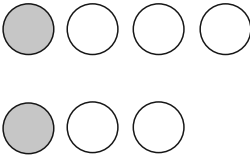
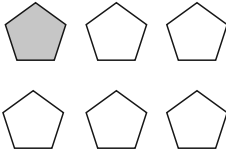
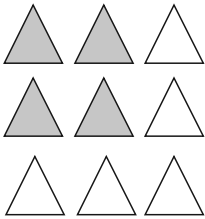
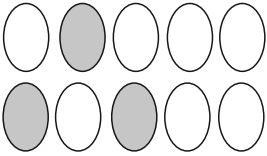
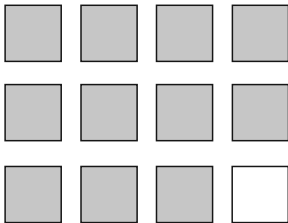




Identifying Fractional Parts

$\frac{3}{5}$ ← The numerator tells how many parts of a whole you are looking at.
 ← The denominator tells how many parts there are altogether.

Write a fraction that tells what part is shaded.

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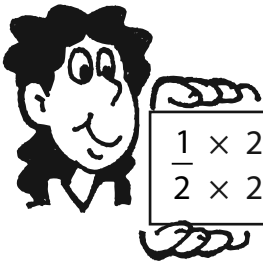
Find the fractions.

E There are 12 paper squares. If 7 of the squares are red, what fraction of the squares is not red?

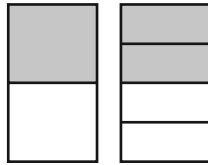
F There are 15 flowers. If 4 of the flowers are pink and 4 of them are white, what fraction of the flowers is pink or white?

Equivalent Fractions

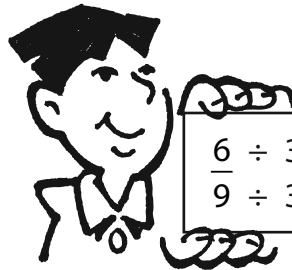
Fractions that have the same value are equivalent fractions. You can multiply or divide to find equivalent fractions.



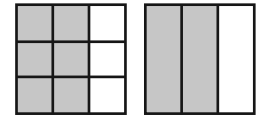
$$\frac{1}{2} \times 2 = \frac{2}{4}$$



$$\frac{1}{2} = \frac{2}{4}$$



$$\frac{6}{9} \div 3 = \frac{2}{3}$$



$$\frac{6}{9} = \frac{2}{3}$$

Multiply to find equivalent fractions.

A

$$\frac{1}{2} = \frac{\quad}{8}$$

$$\frac{1}{4} = \frac{\quad}{12}$$

$$\frac{1}{3} = \frac{\quad}{9}$$

$$\frac{1}{5} = \frac{\quad}{10}$$

B

$$\frac{2}{3} = \frac{\quad}{12}$$

$$\frac{3}{4} = \frac{\quad}{8}$$

$$\frac{5}{6} = \frac{\quad}{12}$$

$$\frac{7}{9} = \frac{\quad}{18}$$

Divide to find equivalent fractions.

C

$$\frac{8}{10} = \frac{\quad}{5}$$

$$\frac{9}{12} = \frac{\quad}{4}$$

$$\frac{2}{6} = \frac{\quad}{3}$$

$$\frac{4}{10} = \frac{\quad}{5}$$

D

$$\frac{4}{16} = \frac{\quad}{4}$$

$$\frac{20}{24} = \frac{\quad}{6}$$

$$\frac{16}{20} = \frac{\quad}{5}$$

$$\frac{15}{18} = \frac{\quad}{6}$$

Write equivalent fractions.

E

$$\frac{6}{36} = \frac{\quad}{12}$$

$$\frac{4}{9} = \frac{\quad}{18}$$

$$\frac{3}{8} = \frac{\quad}{24}$$

$$\frac{5}{15} = \frac{\quad}{3}$$

F

$$\frac{4}{12} = \frac{\quad}{3}$$

$$\frac{7}{10} = \frac{\quad}{20}$$

$$\frac{3}{5} = \frac{\quad}{15}$$

$$\frac{6}{30} = \frac{\quad}{5}$$

G

$$\frac{6}{10} = \frac{\quad}{5}$$

$$\frac{18}{24} = \frac{\quad}{4}$$

$$\frac{7}{12} = \frac{\quad}{36}$$

$$\frac{10}{15} = \frac{\quad}{3}$$

Simplest Form

A fraction is in the simplest form when 1 is the greatest number that can divide the numerator and denominator evenly. To simplify a fraction, keep dividing the numerator and denominator by a common factor until you can't divide anymore.

$$\frac{12}{18} \rightarrow \frac{12 \div 2}{18 \div 2} = \frac{6}{9} \rightarrow \frac{6 \div 3}{9 \div 3} = \frac{2}{3}$$



Write each fraction in simplest form.

A $\frac{6}{8} =$ $\frac{4}{6} =$ $\frac{5}{10} =$ $\frac{12}{15} =$

B $\frac{6}{21} =$ $\frac{5}{20} =$ $\frac{16}{24} =$ $\frac{3}{27} =$

C $\frac{9}{15} =$ $\frac{8}{12} =$ $\frac{15}{18} =$ $\frac{28}{35} =$

D $\frac{16}{28} =$ $\frac{21}{27} =$ $\frac{9}{30} =$ $\frac{15}{24} =$

Solve. Write the answers in simplest form.

E There are 21 flowers. If 9 of the flowers are yellow, what fraction of the flowers is yellow?

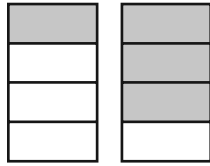
F Mrs. Blair's class has 30 students. If 3 of the students are absent today, what fraction of the class is in school?

G There are 35 balloons. If 21 of the balloons are blue, what fraction of the balloons is not blue?

H Matt had \$40. He spent \$10 on books and \$14 on markers. What fraction of his money did he spend?

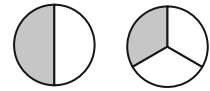
Comparing Fractions—Like Denominators, Like Numerators

When comparing fractions that have the same denominators, look at the numerators. The fraction with the larger numerator is greater.



$$\frac{1}{4} < \frac{3}{4}$$

When comparing fractions that have the same numerators, look at the denominators. The fraction with the smaller denominator is greater.



$$\frac{1}{2} > \frac{1}{3}$$

Compare the fractions. Write > or < in the circles.

A

$\frac{1}{2} \bigcirc \frac{1}{3}$

$\frac{4}{5} \bigcirc \frac{2}{5}$

$\frac{2}{3} \bigcirc \frac{1}{3}$

$\frac{4}{7} \bigcirc \frac{6}{7}$

B

$\frac{1}{8} \bigcirc \frac{1}{5}$

$\frac{3}{7} \bigcirc \frac{3}{4}$

$\frac{5}{6} \bigcirc \frac{5}{10}$

$\frac{2}{5} \bigcirc \frac{2}{9}$

Write the fractions in order from the least to the greatest.

C

$\frac{1}{7}, \frac{1}{4}, \frac{1}{9}, \frac{1}{3}$

D

$\frac{3}{8}, \frac{7}{8}, \frac{5}{8}, \frac{2}{8}$

E

$\frac{5}{6}, \frac{5}{10}, \frac{5}{12}, \frac{5}{9}$

Solve.

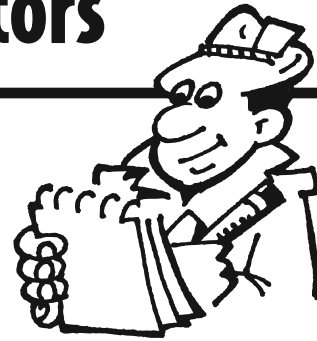
F

Lisa, Jamie, and Sandy each made a bracelet with 24 beads. On Lisa's bracelet, $\frac{2}{12}$ of the beads were blue. On Jamie's bracelet, $\frac{2}{6}$ of the beads were blue. On Sandy's bracelet, $\frac{2}{8}$ of the beads were blue.

Who used the greatest number of blue beads? _____

Who used the fewest number of blue beads? _____

Comparing Fractions by Finding Common Denominators



When comparing fractions that have different denominators, first find equivalent fractions that have a common denominator. Then compare.

Example: Compare $\frac{2}{5}$ and $\frac{1}{4}$

1. Find a common denominator.
Since 5×4 is 20, 20 is a common denominator for $\frac{2}{5}$ and $\frac{1}{4}$.

2. Change to equivalent fractions.

$$\frac{2}{5} = \frac{8}{20} \quad \frac{1}{4} = \frac{5}{20}$$

3. Compare. Since $\frac{8}{20}$ is greater than $\frac{5}{20}$, $\frac{2}{5}$ is greater than $\frac{1}{4}$.

$$\frac{2}{5} > \frac{1}{4}$$

Change the fractions in each pair to equivalent fractions that have common denominators. Then compare the fractions by writing $>$, $<$, or $=$ in the circles.

A

$\frac{1}{3} \bigcirc \frac{3}{5}$

$\frac{1}{4} \bigcirc \frac{3}{6}$

$\frac{2}{3} \bigcirc \frac{1}{2}$

$\frac{3}{7} \bigcirc \frac{1}{10}$

B

$\frac{3}{5} \bigcirc \frac{5}{12}$

$\frac{2}{3} \bigcirc \frac{3}{5}$

$\frac{3}{8} \bigcirc \frac{4}{7}$

$\frac{9}{10} \bigcirc \frac{5}{6}$

C

$\frac{3}{4} \bigcirc \frac{4}{5}$

$\frac{1}{5} \bigcirc \frac{2}{7}$

$\frac{4}{9} \bigcirc \frac{2}{5}$

$\frac{5}{8} \bigcirc \frac{3}{11}$

Solve.

D

Evan has 15 marbles. If $\frac{1}{3}$ of the marbles are blue and $\frac{2}{5}$ are yellow, does he have more blue marbles or yellow marbles?

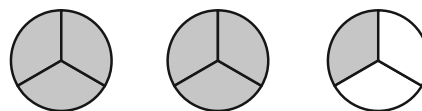
E

Ashley has a quilt made up of 24 squares. If $\frac{3}{8}$ of the squares are red and $\frac{1}{4}$ of the squares are purple, does the quilt have more red squares or purple squares?

Mixed Numbers and Improper Fractions

A mixed number is made up of a whole number and a fraction. An improper fraction has a numerator that is greater than or equal to the denominator.

To change a mixed number to an improper fraction, first change the whole number to fraction form. Do this by multiplying the denominator and the whole number. Then add the fractional part of the mixed number to get the total number of parts.



mixed number $\rightarrow 2\frac{1}{3} = \frac{7}{3}$ \leftarrow improper fraction

$2\frac{1}{3} \rightarrow$ Think 2×3 to get the number of thirds. $\leftarrow \frac{6}{3}$
Then add $\frac{6}{3}$ and $\frac{1}{3}$ to get $\frac{7}{3}$.

Change the mixed numbers to improper fractions or whole numbers.

- A** $2\frac{1}{4} =$ _____ $4\frac{1}{4} =$ _____ $3\frac{2}{9} =$ _____ $2\frac{5}{8} =$ _____
- B** $1\frac{4}{5} =$ _____ $2\frac{3}{7} =$ _____ $5\frac{4}{11} =$ _____ $3\frac{7}{12} =$ _____
- C** $6\frac{3}{4} =$ _____ $5\frac{3}{10} =$ _____ $3\frac{4}{9} =$ _____ $10\frac{2}{5} =$ _____

To change an improper fraction to a mixed number, divide the numerator by the denominator to find the whole number. Write the remainder as a fraction.

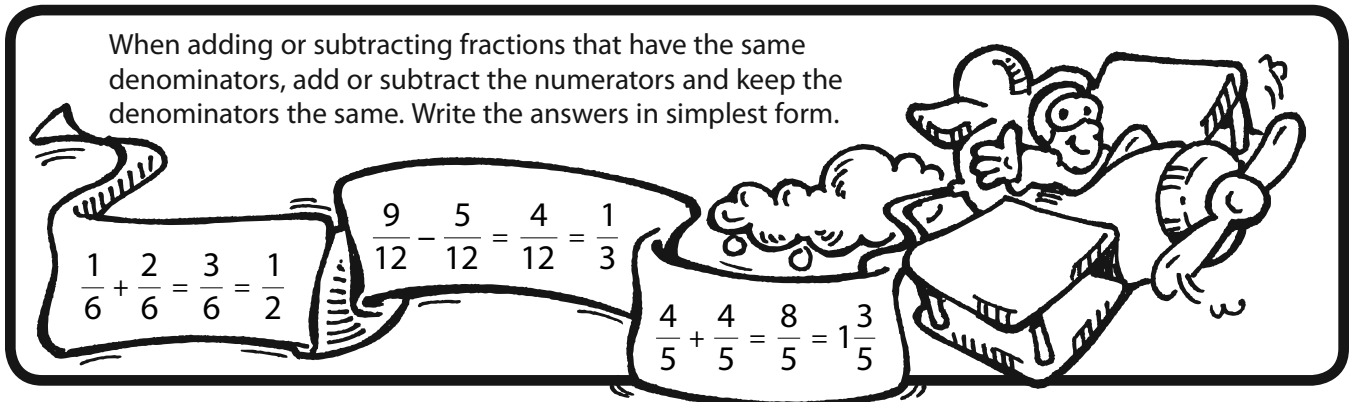
$\frac{7}{3} \rightarrow 3 \overline{)7}$ \leftarrow number of wholes
 $\frac{7}{3} \rightarrow 2\frac{1}{3}$ \leftarrow number of thirds left over

Change the mixed numbers to improper fractions or whole numbers.

- D** $\frac{9}{2} =$ _____ $\frac{12}{3} =$ _____ $\frac{13}{4} =$ _____ $\frac{12}{7} =$ _____
- E** $\frac{15}{5} =$ _____ $\frac{19}{8} =$ _____ $\frac{51}{10} =$ _____ $\frac{32}{5} =$ _____
- F** $\frac{29}{3} =$ _____ $\frac{55}{8} =$ _____ $\frac{24}{3} =$ _____ $\frac{41}{12} =$ _____

Adding and Subtracting Fractions with Like Denominators

When adding or subtracting fractions that have the same denominators, add or subtract the numerators and keep the denominators the same. Write the answers in simplest form.



Add or subtract the fractions. Write the answers in simplest form.

A $\frac{1}{5} + \frac{2}{5} =$

$\frac{5}{9} + \frac{1}{9} =$

$\frac{2}{7} + \frac{3}{7} =$

B $\frac{11}{12} - \frac{2}{12} =$

$\frac{7}{8} - \frac{3}{8} =$

$\frac{10}{11} - \frac{2}{11} =$

C $\frac{4}{7} + \frac{9}{7} =$

$\frac{8}{9} - \frac{3}{9} =$

$\frac{13}{15} - \frac{7}{15} =$

D $\frac{7}{10} - \frac{3}{10} =$

$\frac{6}{8} + \frac{4}{8} =$

$\frac{3}{6} + \frac{5}{6} =$

E $\frac{9}{14} - \frac{2}{14} =$

$\frac{10}{12} - \frac{2}{12} =$

$\frac{8}{9} + \frac{8}{9} =$

Solve. Write the answers in simplest form.

F Maria lives $1\frac{1}{2}$ mile from the airport. Andy lives $\frac{1}{2}$ mile from the airport. How much farther is Maria's home from the airport than Andy's home?

G Ryan has 3 toy planes. Each one is $\frac{3}{4}$ foot long. If he lines up the planes so that they touch one another, how long will the line be?
