

Grade 5 Module 3

Tips for Families

Key Concepts Overview

Focus TEKS: **5.3A, 5.3H, 5.3K**

The focus of Module 3 is to extend from earlier work with fraction equivalence and decimals to develop student understanding of addition and subtraction of fractions. Your student will:

- ☐ Add and subtract fractions with **unlike denominators** by making like units through a progression of material from concrete to representational to abstract.
- ☐ Use **benchmark fractions** to assess reasonableness of addition and subtraction equations.
- ☐ Solve multi-step word problems and assess the reasonableness of the answers.

You can use the checklist above to help monitor your student's progress of the knowledge and skills in this module. Daily sample problems with solutions and thought bubbles are found in the Homework Helper pages of the Succeed Student Edition to help you support your student as they work at home.

Additional Ways to Help at Home

- Play the “Find the Smallest Multiple” dice game with your student.
 1. You and your student roll a die or use a random number generator on a phone or computer.
 2. Ask him, “What’s the smallest common multiple of these two numbers?”For example, you roll the number 6. Your student rolls the number 4. You ask, “What’s the smallest multiple of 6 and 4?” He says, “12.”
- Play the “Add or Subtract Fractions” card game with your student. Use playing cards and take out the jacks, queens, kings, aces, and jokers. Put the stack of remaining cards facedown.
 1. You and your student flip two cards.
 2. Both you and your student arrange each pair of cards as a fraction by using the smaller number as the numerator and the larger number as the denominator.
 3. Use these two fractions to write an addition or subtraction sentence and ask her to solve it. When writing a subtraction fraction sentence, the larger fraction should be written first.

For example, you flip two cards with the numbers 4 and 5. They represent the fraction $\frac{4}{5}$. Your student flips two cards with the numbers 3 and 2. They represent the fraction $\frac{2}{3}$. You write $\frac{4}{5} + \frac{2}{3}$ or $\frac{4}{5} - \frac{2}{3}$ and ask her to solve it. She writes $\frac{4}{5} + \frac{2}{3} = 1\frac{7}{15}$ or $\frac{4}{5} - \frac{2}{3} = \frac{2}{15}$.

- Play the “Comparing Fractions” dice game with your student.



1. You and your student roll two dice.
2. Arrange each pair of dice as a fraction by using the smaller number rolled as the numerator and the larger number rolled as the denominator.
3. Write the two fractions and ask him, “Which fraction is closer to 1 whole?”

For example, you roll the numbers 2 and 3. They represent the fraction $\frac{2}{3}$. Your student rolls the numbers 6 and 1. They represent the fraction $\frac{1}{6}$. You write $\frac{2}{3}$ and $\frac{1}{6}$ and ask him, “Which fraction is closer to 1 whole?” He says, “ $\frac{2}{3}$.”

If dice are not available, the game may be played using a random number generator on a phone or computer.

Terms

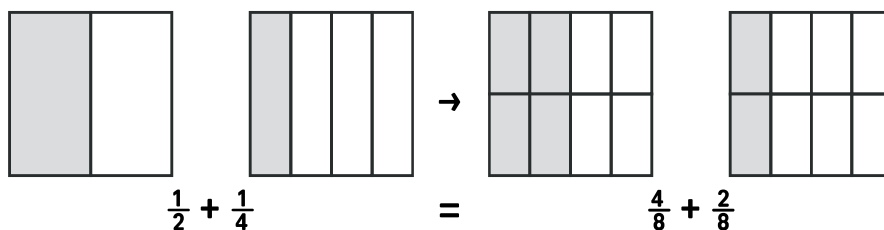
Benchmark fraction: a fraction against which another fraction can be measured or compared; is a benchmark fraction when comparing $\frac{1}{3}$ and $\frac{3}{5}$

Denominator (*Denominador*): the part of a fraction written below the fraction bar that identifies the total number of fractional units in a whole or set

$$\frac{5}{6}$$

The denominator of this fraction is 6.

Equivalent fractions (*Fracción equivalente*): fractions that name the same size or amount



Like denominators: when two or more fractions have the same denominator

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

The denominators are the same.



Numerator (*Numerador*): the part of a fraction written above the fraction bar that identifies the number of fractional units specified or being considered

$$\frac{5}{6}$$

← The numerator of this fraction is 5.

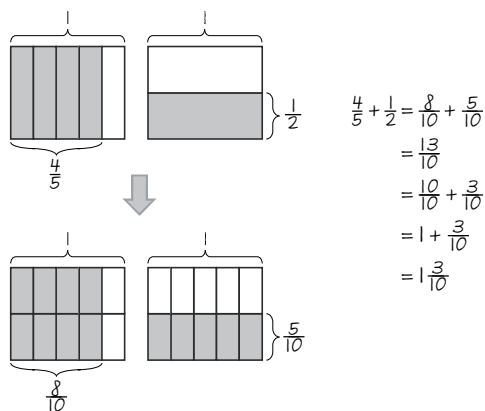
Unlike denominators: when two or more fractions have different denominators

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

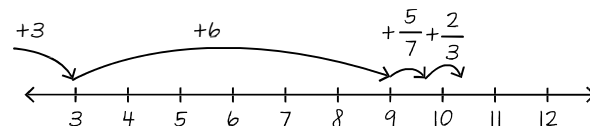
↙ ↘
The denominators are different.

Models

Rectangular Fraction Model



Number Line



$$\begin{aligned} & 3\frac{5}{7} + 6\frac{2}{3} \\ &= 9\frac{5}{7} + \frac{2}{3} \\ &= 9\frac{15}{21} + \frac{14}{21} \\ &= 9\frac{29}{21} \\ &= 9\frac{21}{21} + \frac{8}{21} \\ &= 10\frac{8}{21} \end{aligned}$$

