

Learning Targets

Dividing Fractions

Lesson 1: Size of Divisor and Size of Quotient

- When dividing, I know how the size of a divisor affects the quotient.

Lesson 2: Meanings of Division

- I can explain how multiplication and division are related.
- I can explain two ways of interpreting a division expression such as $27 \div 3$.
- When given a division equation, I can write a multiplication equation that represents the same situation.

Lesson 3: Interpreting Division Situations

- I can create a diagram or write an equation that represents division and multiplication questions.
- I can decide whether a division question is asking “how many groups?” or “how many in each group?”.

Lesson 4: How Many Groups? (Part 1)

- I can find how many groups there are when the amount in each group is not a whole number.
- I can use diagrams and multiplication and division equations to represent “how many groups?” questions.

Lesson 5: How Many Groups? (Part 2)

- I can find how many groups there are when the number of groups and the amount in each group are not whole numbers.

Lesson 6: Using Diagrams to Find the Number of Groups

- I can use a tape diagram to represent equal-sized groups and find the number of groups.

Lesson 7: What Fraction of a Group?

- I can tell when a question is asking for the number of groups and that number is less than 1.
- I can use diagrams and multiplication and division equations to represent and answer “what fraction of a group?” questions.

Lesson 8: How Much in Each Group? (Part 1)

- I can tell when a question is asking for the amount in one group.
- I can use diagrams and multiplication and division equations to represent and answer “how much in each group?” questions.

Lesson 9: How Much in Each Group? (Part 2)

- I can find the amount in one group in different real-world situations.

Lesson 10: Dividing by Unit and Non-Unit Fractions

- I can divide a number by a non-unit fraction $\frac{a}{b}$ by reasoning with the numerator and denominator, which are whole numbers.
- I can divide a number by a unit fraction $\frac{1}{b}$ by reasoning with the denominator, which is a whole number.

Lesson 11: Using an Algorithm to Divide Fractions

- I can describe and apply a rule to divide numbers by any fraction.

Lesson 12: Fractional Lengths

- I can use division and multiplication to solve problems involving fractional lengths.

Lesson 13: Rectangles with Fractional Side Lengths

- I can use division and multiplication to solve problems involving areas of rectangles with fractional side lengths.

Lesson 14: Fractional Lengths in Triangles and Prisms

- I can explain how to find the volume of a rectangular prism using cubes that have a unit fraction as their edge length.
- I can use division and multiplication to solve problems involving areas of triangles with fractional bases and heights.
- I know how to find the volume of a rectangular prism even when the edge lengths are not whole numbers.

Lesson 15: Volume of Prisms

- I can solve volume problems that involve fractions.

Lesson 16: Solving Problems Involving Fractions

- I can use mathematical expressions to represent and solve word problems that involve fractions.

Lesson 17: Fitting Boxes into Boxes

- I can use multiplication and division of fractions to reason about real-world volume problems.