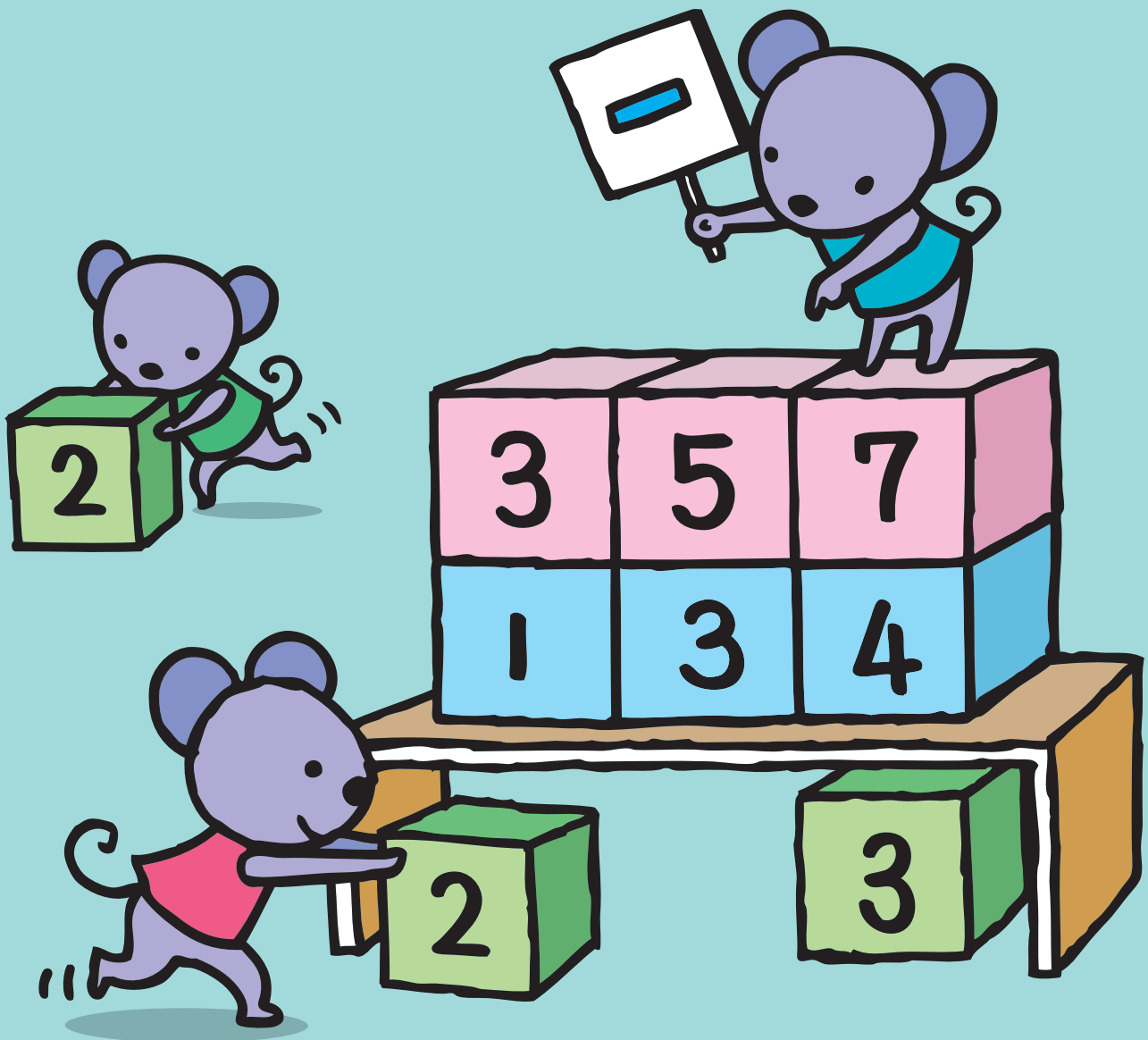


Individualized Learning Program
Based on a Computer Diagnosis Enables Self-paced Learning

JEI[®] Math



JEI Self-Learning Math

JEI Math offers a complete program for grades Pre-K to 9 and encourages conceptual understanding!



Each level of the JEI Math Program is designed with specific learning objectives, providing a step-by-step approach which makes learning easy for students of all abilities. The JEI Math curriculum is aligned with State Standards, covering all major domains: Number Concepts, Operations, Geometry, Measurement, Data Analysis, and more.

Features of JEI Math

JEI Math explores mathematics through everyday questions and experiences. It is designed to develop mathematical thinking skills.

- 1 Based on specific, clear learning objectives, students learn to study independently through structured materials, the evaluation system, and guidance from the instructor.
- 2 By learning the principles of each concept first, learning new, more challenging concepts becomes easier, with more speed, accuracy, and complexity.
- 3 Learning objectives are divided into small, easy-to-digest steps, making even the most difficult concepts manageable, building self-confidence and strong self-study habits.
- 4 Going beyond repetition of basic calculations and facts, students focus on depth of understanding with just enough practice to fully master the concepts and objectives.
- 5 By being exposed to all mathematical domains, students are better able to make the connections between the different domains and between all levels of math, further enhancing problem-solving ability.



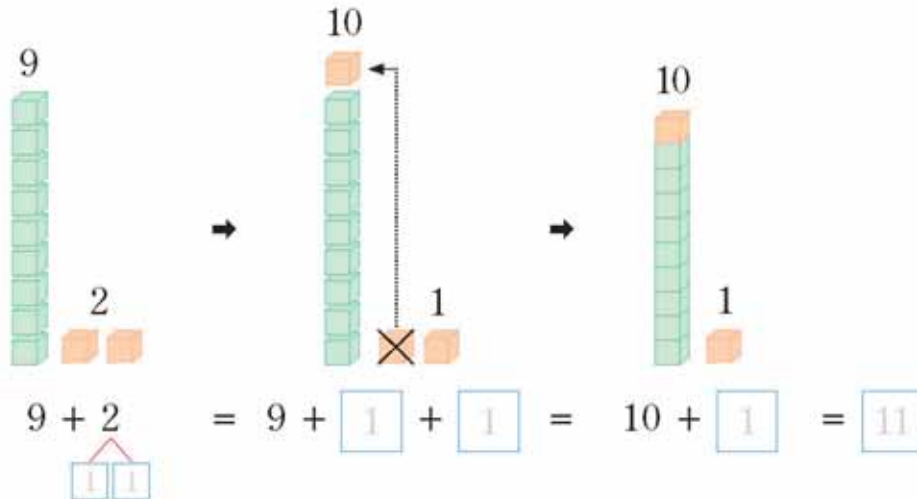
Understanding the principle of addition and subtraction

The contents from JEI Math E08



Let's make ten! Fill in the blanks.

How many ones does 9 need to become a 10?

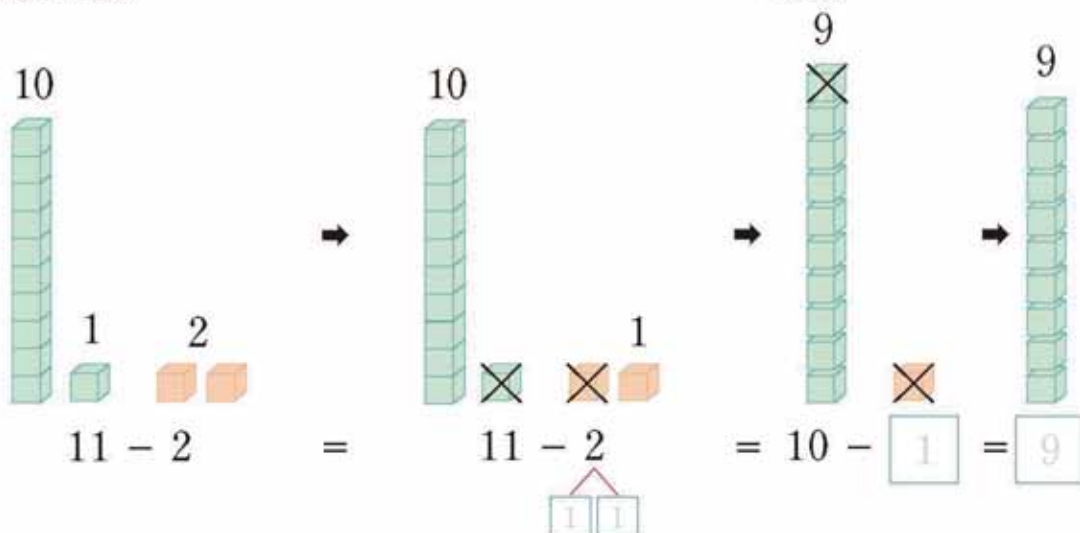


Fill in the blanks.

Are there enough ones to subtract 2 ones?

First, subtract from the ones.

Then subtract from the 10.



Learn addition and subtraction by breaking apart numbers, making it easier to add and subtract as numbers get larger. Students can then easily transition to addition and subtraction with regrouping.



Solve Word Problems: Addition and subtraction

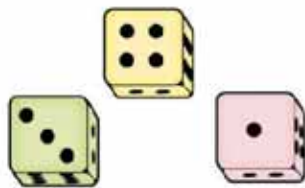
The contents from JEI Math E25

Tony and Eric played a dice game.

1. They get the following points for each face of the die.
Find the pattern of the points and fill in the blanks.

face of a die						
points	11	22	33			

Tony and Eric threw the die 3 times each. These are the results.



Tony



Eric

2. Write Tony's points in the boxes. What is the total?

 — —

3. Write the Eric's points in the boxes. What is the total?

 — —

4. What is the difference of the two totals?

Read the problem and write the appropriate addition or subtraction sentence before computing.

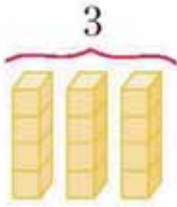


Understanding multiplication

The contents from JEI Math F02



Complete each number sentence.



$$4 + 4 + 4$$

=

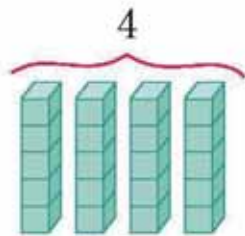


$$3 \times 4$$

=

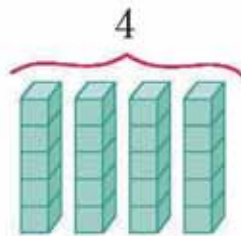


$$12$$



$$5 + 5 + 5 + 5$$

=



$$4 \times 5$$

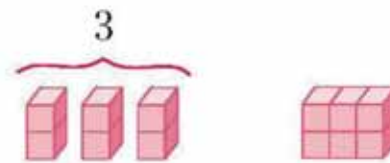
=



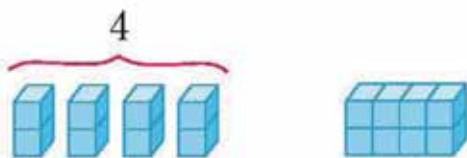
$$\underline{\quad}$$



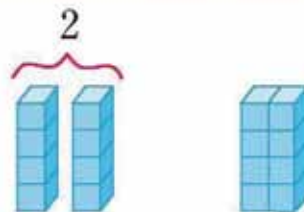
$$5 \times 2 = 10$$



$$3 \times 2 = \underline{\quad}$$



$$4 \times 2 = \underline{\quad}$$



$$2 \times 4 = \underline{\quad}$$

Using arrays, make multiplication sentence and understand the principle of multiplication through repeated addition.

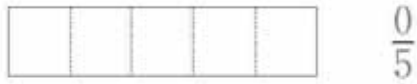


Understanding of addition fractions with like denominators

The contents from JEI Math G21



Complete.



$$\frac{0}{5}$$



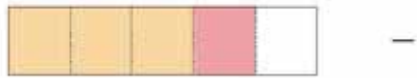
$$\frac{1}{5}$$



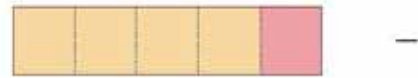
$$\frac{2}{5}$$



$$\frac{3}{5}$$



$$\frac{4}{5}$$



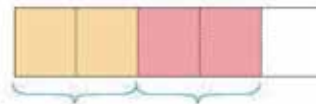
$$\frac{5}{5}$$

1.



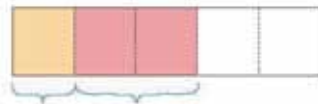
$$\frac{1}{5} + \frac{1}{5} = \frac{1+1}{5} = \frac{2}{5}$$

2.



$$\frac{2}{5} + \frac{2}{5} = \frac{2+2}{5} = \frac{4}{5}$$

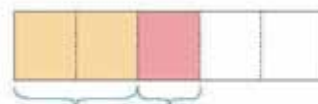
3.



$$\frac{1}{5} + \frac{2}{5} = \frac{1+2}{5} = \frac{3}{5}$$

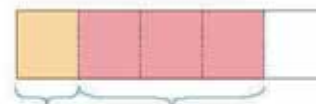


4.



$$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5}$$

5.



$$\frac{1}{5} + \frac{3}{5} = \frac{1+3}{5} = \frac{4}{5}$$

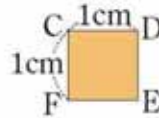
Visualizing and understanding the addition of fractions using the figures provided, making computation easier.



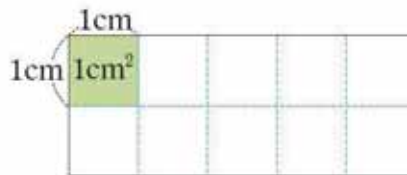
Understanding the area of figures

The contents from JEI Math H26

We will now discuss ways to find the areas of polygons.



- (1) Line segment AB has a length of one centimeter.
A centimeter is a (linear unit, square unit).
- (2) Square CDEF has an area of one square centimeter.
A square centimeter is a square unit.
Each side of this square measures 1cm.
The area of the square is 1 square centimeter (cm^2).



Each square in this rectangle has an area of 1 square centimeter (cm^2).
How many square centimeters are there in the rectangle?
The area of the rectangle is 10 square centimeters (cm^2).
We can find the area of the rectangle by counting the unit squares needed to cover the region.
Are centimeters linear units? (yes, no)
Are square centimeters linear units? (yes, no)

We measure lengths in linear units.
We measure areas in square units.

Understand the concept of area through pictures and compute the area of the figure.