

# Instruction Coach<sup>TM</sup> Mathematics

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Problem Solving



Fluency Lesson







Performance Task

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# Chapter I

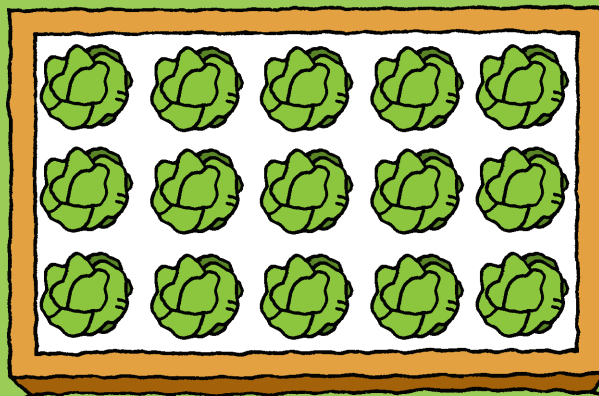
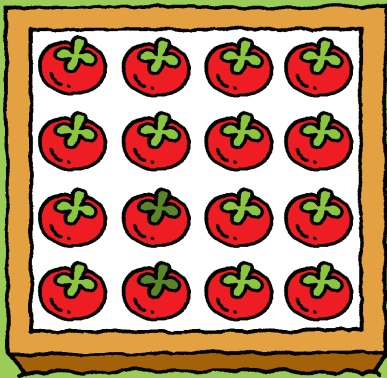
## Operations and Algebraic Thinking

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# Chapter 1

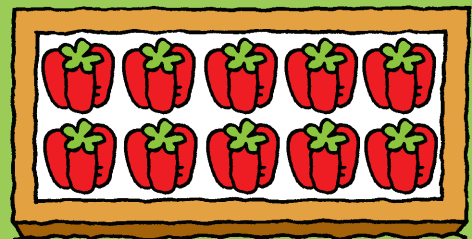
## Operations and Algebraic Thinking

Tomatoes

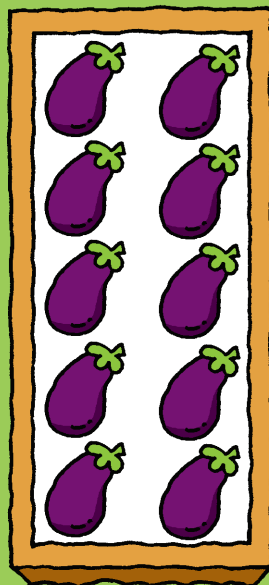


Cabbage

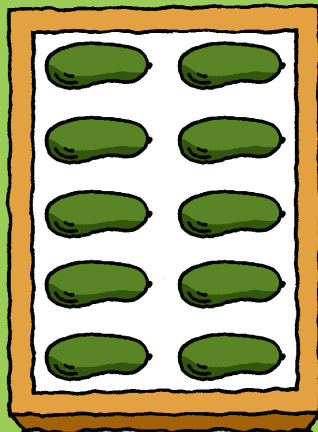
Peppers



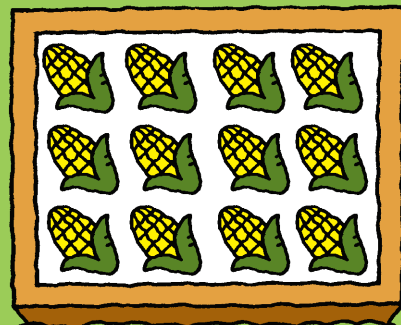
Eggplant



Zucchini



Corn



How many more tomatoes than peppers are in the garden?

## Lesson 2 Problem Solving: Subtraction

★ You can **subtract** to solve word problems.  
When you subtract one number from another,  
the answer is the **difference**.

### Example 1

There are 19 smiley stickers.  
Of these, 8 are blue. The rest are yellow.  
How many stickers are yellow?

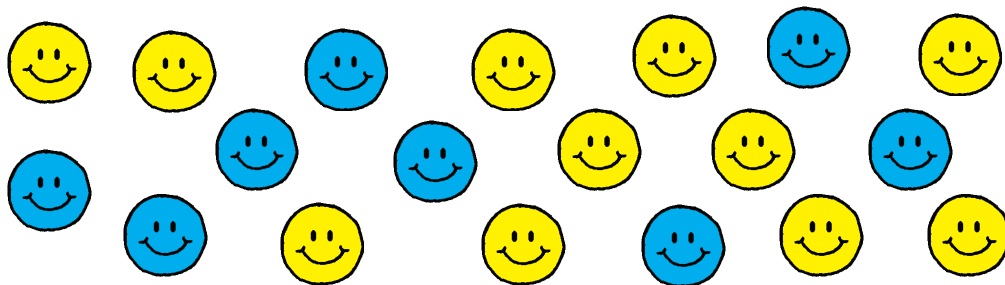
$$19 - 8 = \square$$

Draw the whole group.

Draw 19 smiley stickers.

Make 8 smiley stickers blue.

Make the rest of the stickers yellow.



Count the smiley stickers that are yellow.

$$19 - 8 = \begin{array}{|c|c|} \hline \vdots & \vdots \\ \hline \end{array}$$

► There are \_\_\_\_\_ yellow stickers.

## Example 2

A squirrel had 20 acorns.

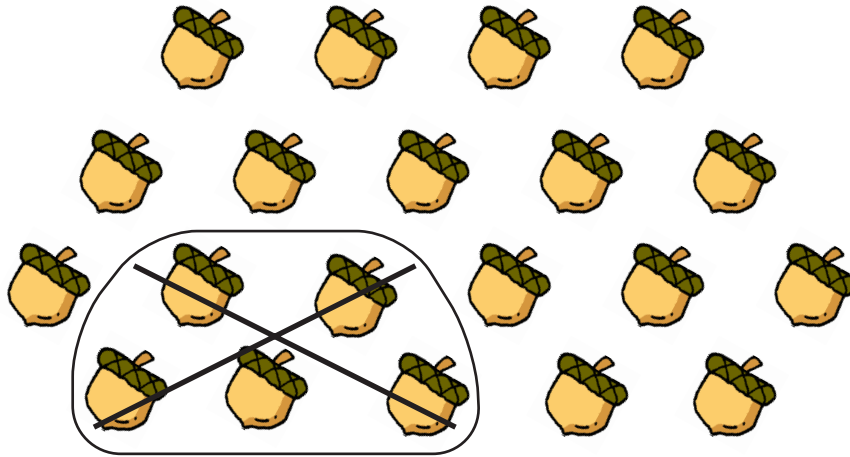
It ate 5 of them.

How many acorns were left?

$$20 - 5 = \square$$

Draw the whole group. Draw 20 acorns.

Take 5 acorns from the group.



Find the number of acorns that are left.

$$20 - 5 = \boxed{15}$$

► There were \_\_\_\_\_ acorns left.

### Example 3

Blake had 70 pennies.

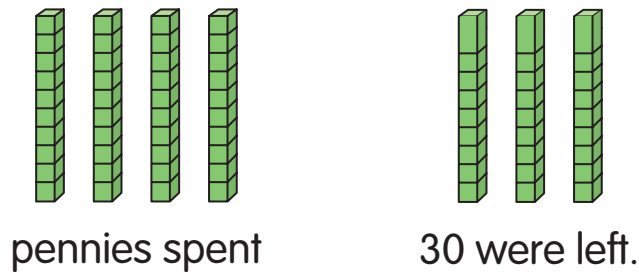
He spent some pennies.

Then he had 30 pennies left.

How many pennies did Blake spend?

$$70 - \square = 30$$

Show 70 in all.



4 tens show the pennies spent.

$$4 \text{ tens} = 40$$

$$70 - \boxed{40} = 30$$

► Blake spent \_\_\_\_\_ pennies.



### Example 4

Some walnuts were on the table.

Sharon ate 10 walnuts.

Then 24 walnuts were left.

How many walnuts were on the table to start?

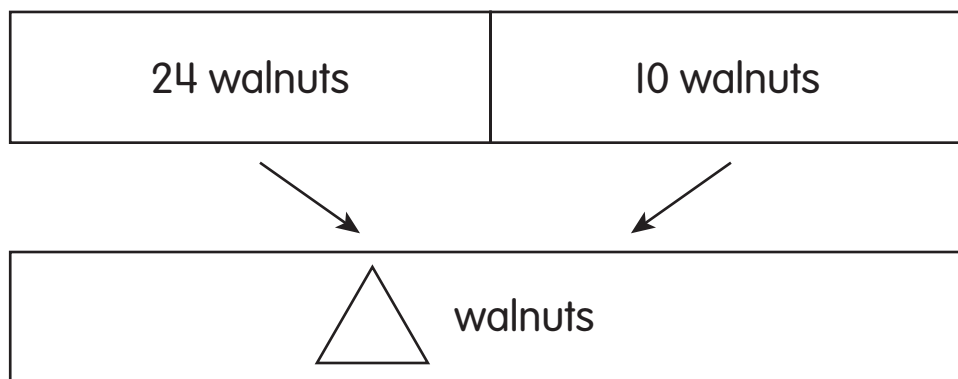
$$\triangle - 10 = 24$$

Use a drawing.

One addend is 10.

The other addend is 24.

The sum is the number of walnuts at the start.



The missing number is the sum. Add the addends to find the sum.

$$24 + 10 = 34$$

$$\triangle_{34} - 10 = 24$$

► There were \_\_\_\_\_ walnuts on the table to start.

### Example 5

Luke has 20 fewer games than Mary-Jo.

Mary-Jo has 50 games.

How many games does Luke have?

Luke has **20 fewer** games than Mary-Jo.

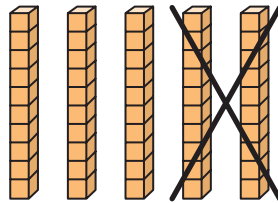
So **subtract 20** from Mary-Jo's number to find Luke's number.

Write and solve an equation.

Mary-Jo's number	minus	20	equals	Luke's number
↓	↓	↓	↓	↓
50	—	20	=	■

Show 50.

Subtract 20.



There are 3 tens left.

$$3 \text{ tens} = 30$$

$$\text{So } 50 - 20 = \underline{30}.$$

▶ Luke has \_\_\_\_\_ games.

★ Sometimes word problems have more than one step.

### Example 6

Haley had 18 storybooks and 3 animal books.  
Then she gave away some books. Now she has  
19 books in all. How many books did she give away?

1

Find how many books Haley had at the start.

$$18 + 3 = \blacksquare$$

Count on 3: 18 → 19, 20, 21

$$\text{So } 18 + 3 = \boxed{21}.$$

Haley had 21 books at the start.

2

Find how many books Haley gave away.

$$21 - \blacktriangle = 19$$

Write a related addition sentence.

$$19 + \blacktriangle = 21$$

Count from 19. Find how many you add to make 21.

$$19 \rightarrow 20, 21 \quad 19 + 2 = 21$$

$$\text{So } 21 - \triangle = 19.$$

► Haley gave away \_\_\_\_\_ books.

## Try

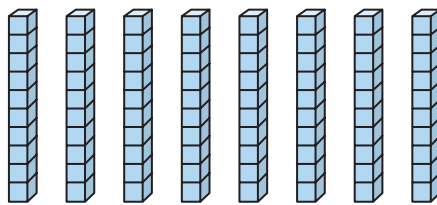
Lucy has 30 fewer coins than Gavin.

Gavin has 80 coins.

How many coins does Lucy have?

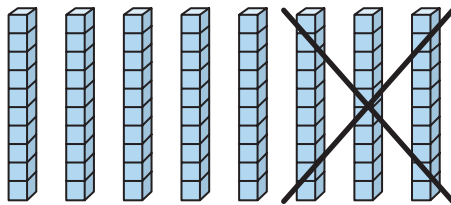
$$80 - 30 = \square$$

Use models to show Gavin's coins.



Show that Lucy has fewer coins than Gavin.

Cross out 30.



There are 5 tens left.

$$5 \text{ tens} = 50$$

$$80 - 30 = \boxed{50}$$

► Lucy has \_\_\_\_\_ coins.

# Practice

- 1** Madison had 96 action figures. She gave some to her friend Tommy. Now she has 56 action figures. How many action figures did Madison give to Tommy?

$$96 - \square = 56$$

- 2** Evan had some toys in the attic. He took 20 of them down from the attic. Now there are 33 toys in the attic. How many toys were in the attic before?

$$\square - 20 = 33$$

- 3** Luis wants to practice his trumpet for 75 minutes. He practiced for 60 minutes. Then he stopped to talk on the phone. For how many more minutes will Luis practice?

$$75 - 60 = \square$$

- 4 Taylor's class is making designs for a school art contest. The girls made 27 designs. The boys made 30 designs. The teacher chose 20 of the designs to enter in the contest. How many of the designs were not entered in the contest?

$$27 + 30 = \square$$

$$\square - 20 = \triangle$$

- 5 **SOLVE** Alex had 72 marbles. He sold 30 of his marbles. Then his friend gave him 6 marbles. How many marbles does Alex have in all?

Write equations and solve the problem.  
Show your work.