

HOME LINK
5•8

Number Stories


Family Note

Children have been telling and solving number stories. Have your child explain the number story that goes with the picture he or she chooses. If you like, help your child record the number story in words. The number model may show addition or subtraction, depending on how your child tells the story.

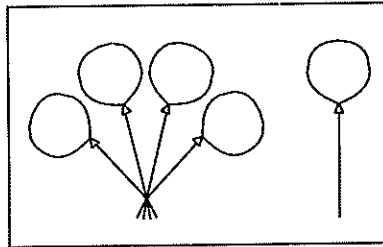
Please return this Home Link to school tomorrow.

Here is a number story Mandy made up.

I have 4 balloons.

Jamal brought 1 more.

We have 5 balloons together.



| |
|-------------|
| Unit |
| balloons |

$$4 + 1 = 5$$

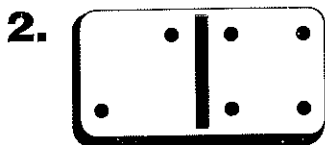
1. Find a picture in a magazine or draw your own picture. Use it to write a number story.

| |
|-------------|
| Unit |
| |

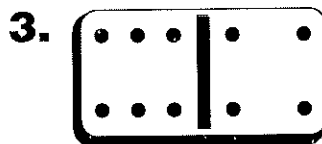
Write a number model to go with your story.

Practice

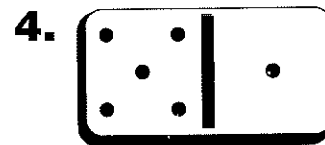
Write each sum.



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



$$6 + 4 = \underline{\quad}$$



$$5 + 1 = \underline{\quad}$$

HOME LINK
5•9



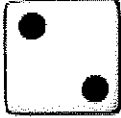

Comparing Sums


Family Note

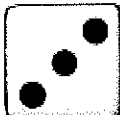



For the next few days, children will return to basic addition facts. They will concentrate on memorizing the +0 and +1 facts (for example, $7 + 0$ and $8 + 1$), doubles facts (for example, $3 + 3$), and facts that have a sum of 10 (for example, $3 + 7$ and $6 + 4$). Consider spending a short time each day practicing these addition facts with your child.

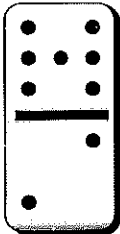
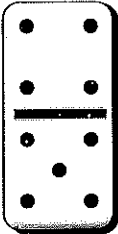
Please return this Home Link to school tomorrow.

Write $<$, $>$, or $=$.

1.  +  _____  + 

2.  +  _____  + 

3.  +  _____  + 

4.  _____ 

Practice

Find the sums.

5. $4 + 3 = \underline{\quad}$

6. $\underline{\quad} = 0 + 9$

7. $\underline{\quad} = 6 + 2$

8. $\underline{\quad} = 10 + 2$

Circle the even sums.

HOME LINK
5•10

Turn-Around Dice

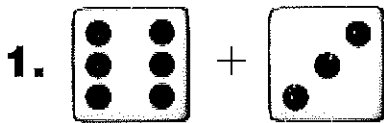


Family Note Turn-around addition facts are pairs of facts in which the numbers being added are the same. Turn-around facts have the same sum. For example, $2 + 3 = 5$ and $3 + 2 = 5$ are turn-around facts. Knowing about turn-around facts cuts down on the number of facts that have to be memorized: If you know a fact, you also know its turn-around fact.

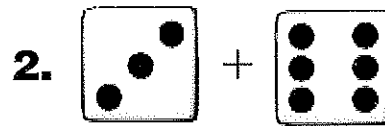
Please return this Home Link to school tomorrow.

Find the total number of dots on the dice.
Use turn-around facts to help you.

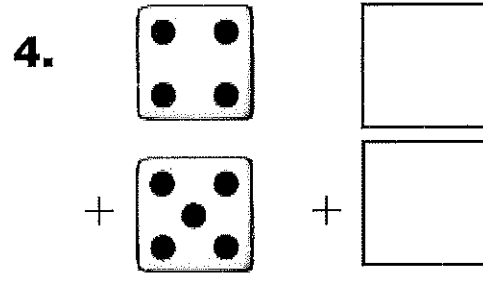
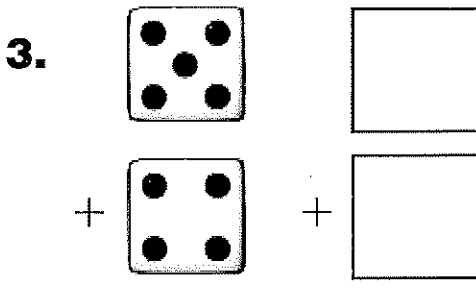
| |
|-------------|
| Unit |
| dice dots |



$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$



$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$



Practice

Solve the riddles.

5. 2 and 4 = _____

6. 4 and 7 = _____

HOME LINK
5•11**Adding 0 and 1**

Family Note Give your child several 1-digit, 2-digit, and 3-digit numbers. Ask him or her to add 0 and 1 to each number.

Include numbers with 9 in the ones place like 9, 49, 79, 129, 359, and 789.
Also use 0 in the tens and ones places, like in 208 and 320.

Please return this Home Link to school tomorrow.

Record your answers in the table below.

1. Ask someone at home to say a 1-digit number; for example, 7. Add 0 to the number and give the answer. Then add 1 to the number and give the answer.
2. Have someone say a 2-digit number. Repeat with a 3-digit number.

Example: $25 + 0 = 25$ $25 + 1 = 26$

Number Models

| | Number | +0 | +1 |
|----------------|---------------|---------------|---------------|
| Example | 25 | $25 + 0 = 25$ | $25 + 1 = 26$ |
| 1-digit number | | | |
| 2-digit number | | | |
| 3-digit number | | | |

Practice

Write $<$, $>$, or $=$.

3. 19 _____ 21 **4.** 10 _____ 4 **5.** 2 _____ 11 **6.** 0 _____ 0



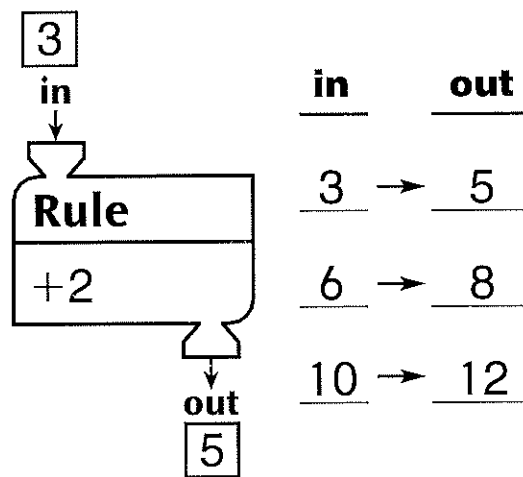
“What’s My Rule?”

Today your child learned about a kind of problem you may not have seen before. We call it “What’s My Rule?” Please ask your child to explain it to you. Here is a little background information you may find useful.

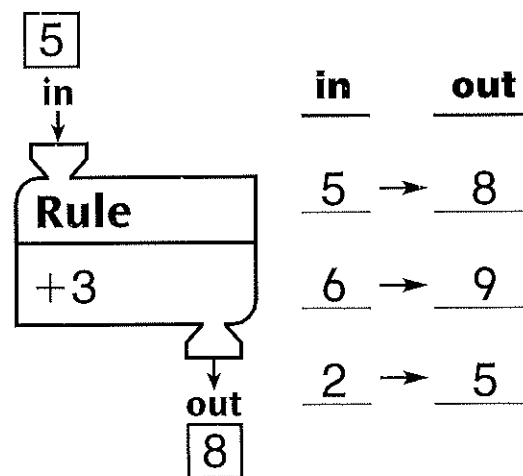
Imagine a machine with a funnel at the top and a tube at the bottom—we call this a *function machine*. The function machine can be programmed so that when you drop a number into the funnel at the top, the machine changes the number according to the rule and a new number comes out of the tube at the bottom.

For example, you can program the machine to add 2 to any number that is dropped into the funnel. If you put in 3, out comes 5; if you put in 6, out comes 8.

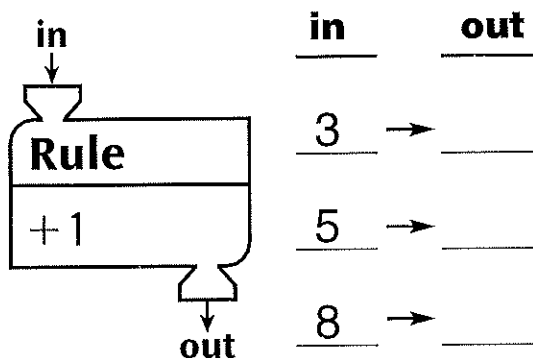
You can show this with a table:



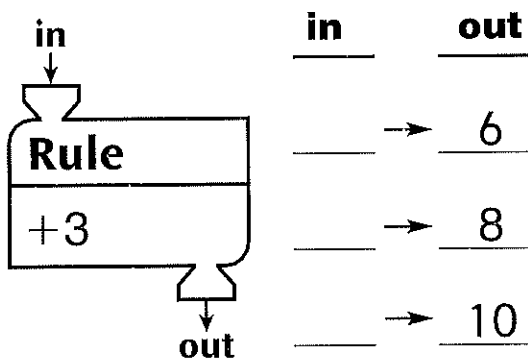
Here is another example of a function machine:



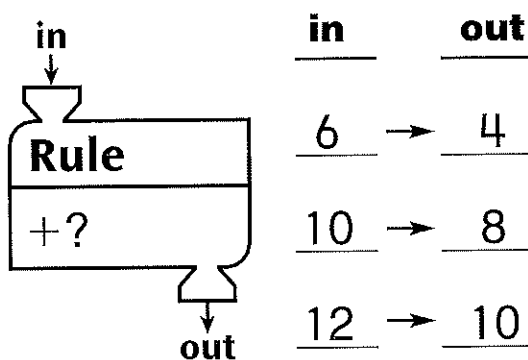
In a “What’s My Rule?” problem, some of the information is missing. To solve the problem, you have to find the missing information. The missing information can be the numbers that come out, the numbers that are dropped in, or the rule for programming the machine. *For example:*



Missing “out” numbers



Missing “in” numbers



Missing rule

HOME LINK
5•12

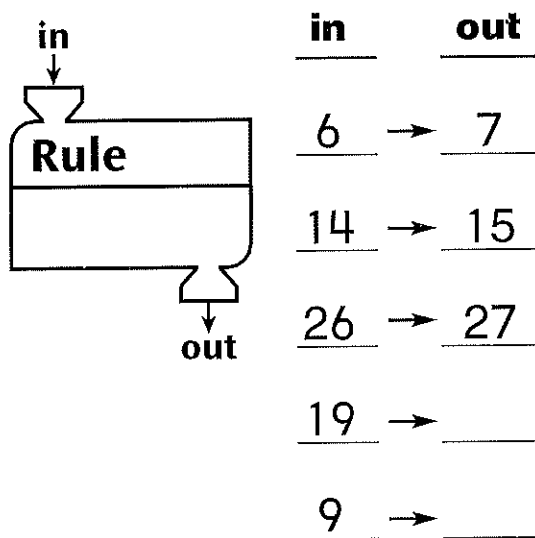
“What’s My Rule?”



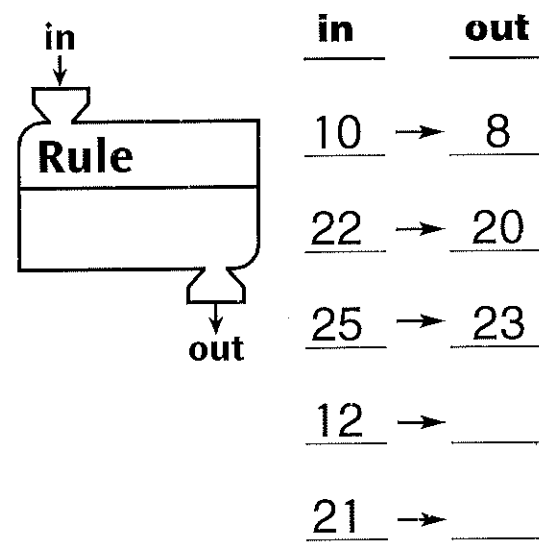
Family Note Ask your child to explain what the function machine is doing to the “in” numbers before filling in the missing “out” numbers. For example, in the first problem, the function machine is adding 1 to each of the “in” numbers.

Please return this Home Link to school tomorrow.

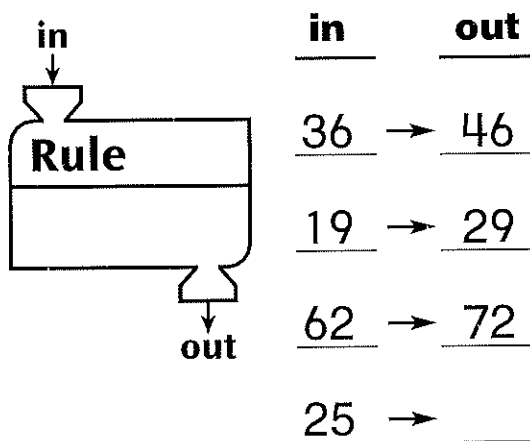
Fill in the missing rule and numbers.

1.


Your turn: _____ → _____

2.


Your turn: _____ → _____

3.


Your turn: _____ → _____

Practice

Add.

4. $5 + 5 =$ _____

5. $7 + 7 =$ _____

6. $3 + 3 =$ _____

7. $9 + 9 =$ _____

More "What's My Rule?"

**Family Note**

Children continue to explore number patterns. Each problem on this page represents a different kind of problem.

In the first problem, your child tries to find the rule. In the second problem, the rule is given. The second problem calls for applying the rule to find the "out" numbers.

Encourage your child to describe how he or she solved each problem.

Please return this Home Link to school tomorrow.

1. Find the rule.

| in | in | out |
|------|----|-----|
| ↓ | 5 | 8 |
| Rule | 10 | 13 |
| out | 18 | 21 |

Your turn:

2. What comes out?

| in | in | out |
|------|----|-----|
| ↓ | 13 | 3 |
| Rule | 26 | |
| -10 | 45 | |
| out | | |

Your turn:

Practice**3. Make your own.**

| in | in | out |
|------|----|-----|
| ↓ | | |
| Rule | | |
| out | | |

4. Count back by 2s.

46, 44, 42,

_____, _____, _____,
 _____, _____, _____,
 _____, _____, _____

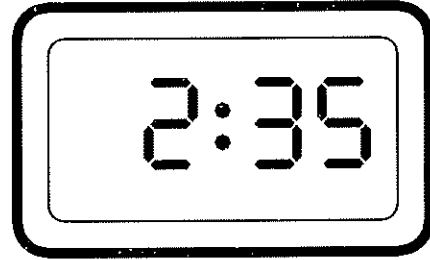


Developing Fact Power

Knowing the basic facts is as important to mathematics as knowing words by sight is to reading. Your child should begin to master many addition and subtraction facts by the end of the year.

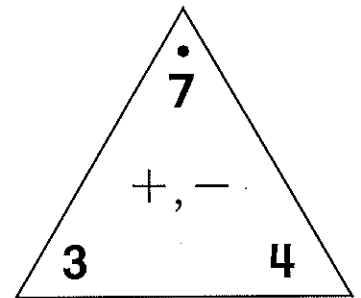
Learning the facts takes practice. It is not necessary to practice for a long time, but it is important to practice often. One good way to practice is to play the games described on the third page of this letter.

Later in this unit, children will extend their time-telling skills by learning to tell time to the nearest 5 minutes and by representing the time in digital notation, as it appears on a digital clock.



Math Tools

Your child will be using *Fact Triangles* to practice and review addition and subtraction facts. Fact Triangles are a "new and improved" version of flash cards; the addition and subtraction facts shown are made from the same three numbers, and this helps your child understand the relationships among those facts. The *Family Note* on Home Link 6-4, which you will receive later, provides a more detailed description of Fact Triangles.



Please keep this letter for reference as your child works through Unit 6.

Vocabulary

Important terms in Unit 6:

fact family A set of related facts linking two inverse operations, such as addition and subtraction. For example:

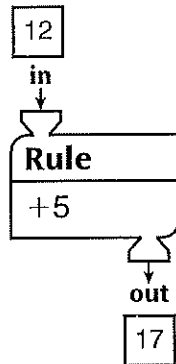
$$3 + 4 = 7$$

$$4 + 3 = 7$$

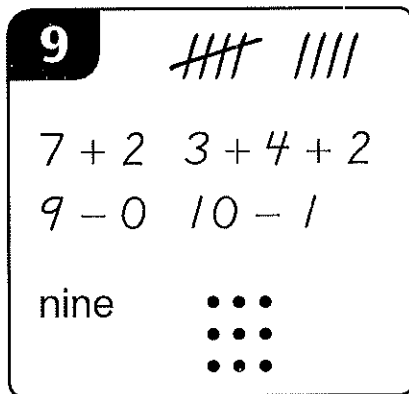
$$7 - 3 = 4$$

$$7 - 4 = 3$$

function machine An imaginary device that receives inputs and generates outputs. The machine usually pairs an input number with an output number by applying a rule such as "+5."



name-collection box A diagram that is used for collecting equivalent names for a number.



digital clock A clock that shows the time with numbers of hours and minutes, usually separated by a colon.

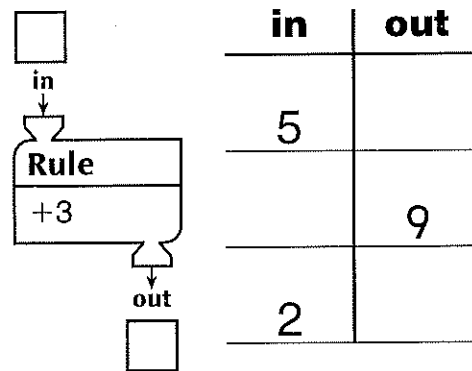


range The difference between the maximum and minimum in a set of data. For example, in the set below, the range is $36 - 28 = 8$.

middle value The number in the middle when the data are listed from smallest to largest. For example, in the data set below, 32 is the middle value:

28 28 31 32 33 35 36

"What's My Rule?" problem A problem in which two of the three parts of a function (input, output, and rule) are known, and the third is to be found out.



Do-Anytime Activities

To work with your child on the concepts taught in this unit and previous units, try these interesting and rewarding activities:

- Using the Fact Triangles, cover the sum for addition practice. Cover one of the other numbers for subtraction practice. Make this brief and fun.
- Have your child tell you a number story that fits a given number model, such as $3 + 5 = 8$.
- Go to your local library and check out the book **12 Ways to Get to 11** by Eve Merriam, an entertaining book that presents addition facts.
- Fill in name-collection boxes. Begin with a number, such as 20, and find at least five equivalent names.

Building Skills through Games

In Unit 6, your child will practice addition, subtraction, and money skills by playing the following games.

Addition Top-It

Players turn over two cards and call out the sum. The player with the higher sum keeps all of the cards. The player with more cards at the end of the game wins.

Fact Power Game

Players take turns naming sums of addition facts on a game board. The player who correctly answers the greatest number of addition facts wins the game.

Coin Exchange

Players put 20 pennies, 10 nickels, and 2 quarters in a pile. At each turn, a player rolls 2 dice and collects the amount of money equal to the number of dots on the dice. Players make exchanges whenever possible. The game ends when there are no more quarters. The player who has the greatest amount of money wins.

As You Help Your Child with Homework

As your child brings assignments home, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through the Home Links in this unit.

Home Link 6•1

- $\frac{5}{14}$ (yellow); $6 + 6 = 12$ (blue);
 $7 + 7 = 14$ (yellow)
 $\frac{8}{15}$ (red); $12 = 3 + 9$ (blue); $\frac{3}{10}$ (green); $\frac{5}{12}$ (blue);
 $\frac{8}{10}$ (green); $5 + 5 = 10$ (green); $\frac{6}{15}$ (red);
 $4 + 6 = 10$ (green)
- Sample answer: ⓓⓓⓓⓃⓅⓅ

Home Link 6•2

- $9 + 1$, $1 + 9$, $8 + 2$, $2 + 8$, $3 + 7$, $7 + 3$, $6 + 4$,
 $4 + 6$, $5 + 5$, $10 + 0$, $0 + 10$

- All names should be equal to 15.
- All names should be equal to 18.

Home Link 6•3

- 7, 5, 12
 $7 + 5 = 12$ $5 + 7 = 12$
 $12 - 7 = 5$ $12 - 5 = 7$
- 6, 9, 15
 $6 + 9 = 15$ $9 + 6 = 15$
 $15 - 6 = 9$ $15 - 9 = 6$
- 30; 24

Home Link 6•4

Your child should practice addition and subtraction facts using Fact Triangles.

Home Link 6•5

- 9, 3, 12
 $9 + 3 = 12$ $3 + 9 = 12$
 $12 - 9 = 3$ $12 - 3 = 9$
- All names should be equal to 14.
- Your child should cross out $5 + 5 + 5$, $2 + 10$, and tally marks totaling 10.
- Sample answer: | | | | | • •

Home Link 6•6

- 1-4** The lengths recorded should match the lengths of the objects chosen by your child.
- 10
 - 9

Home Link 6•7

Your child should practice addition and subtraction facts using Fact Triangles.




Home Link 6•8

- Sample answers:
 (D)(D)(D)(D)(P)(P)(P); (D)(N)(N)(N)(N)(P)(P)(P)
- Sample answers:
 (D)(D)(D)(D)(D)(N)(P)(P);
 (D)(D)(N)(N)(N)(N)(N)(N)(N)(N)(P)(P)
- 9
- 9
- 5

Home Link 6•9

- 50¢ or \$ 0.50
- 82¢ or \$ 0.82
- 43¢ or \$ 0.43
- 66¢ or \$ 0.66
- 74; 75; 77

Home Link 6•10

- 
- 
- 

Home Link 6•11

Your child should practice addition and subtraction facts using Fact Triangles.

Home Link 6•12

- 25 children
- 18
- 5
- 13
- All names should be equal to 12.