

# Fact Triangles 1

The diagram shows a large hexagon divided into six triangles by dashed lines. Each triangle contains numbers and mathematical symbols for a fact triangle activity. The triangles are arranged as follows:

- Top Triangle:** Vertices contain 2 (top-left), 4 (top), and 4 (top-right). Inside are 4, 5, and 6. Symbols: +, -, +, -.
- Top-Right Triangle:** Vertices contain 2 (top-left), 3 (top), and 2 (top-right). Inside are 2, 5, and 6. Symbols: +, -.
- Right Triangle:** Vertices contain 2 (top-left), 2 (top), and 9 (top-right). Inside are 2, 7, and 8. Symbols: +, -, +, -.
- Bottom-Right Triangle:** Vertices contain 2 (top-left), 2 (top), and 10 (top-right). Inside are 6, 7, and 8. Symbols: +, -, +, -.
- Bottom Triangle:** Vertices contain 2 (top-left), 10 (top), and 2 (top-right). Inside are 10, 11, and 12. Symbols: +, -, +, -.
- Bottom-Left Triangle:** Vertices contain 2 (top-left), 8 (top), and 2 (top-right). Inside are 8, 10, and 11. Symbols: +, -, +, -.

# Fact Triangles 2

The image shows a large hexagon divided into six triangles by dashed lines. Each triangle contains numbers and mathematical symbols (+, -) for a fact triangle activity. The numbers are arranged in a way that they can be used to form addition and subtraction facts. The triangles are arranged in two columns of three. The top triangle in each column has a large number at the top vertex and two smaller numbers at the bottom vertices. The middle triangle has two numbers at the top vertices and a larger number at the bottom vertex. The bottom triangle has two numbers at the top vertices and a larger number at the bottom vertex. The symbols '+, -' are placed in the center of each triangle, indicating that the numbers can be used to form both addition and subtraction facts.

Triangle	Top Vertex	Bottom-Left Vertex	Bottom-Right Vertex	Center Symbols
1 (Top-Left)	10	3	13	+ , -
2 (Top-Right)	5	4	15	+ , -
3 (Middle-Left)	6	9	10	+ , -
4 (Middle-Right)	0	1	10	+ , -
5 (Bottom-Left)	10	7	17	+ , -
6 (Bottom-Right)	10	8	20	+ , -

# Fact Triangles 3

The diagram shows a large hexagon divided into six triangles by dashed lines. Each triangle contains numbers and mathematical symbols (+, -) for a fact triangle activity. The numbers are arranged as follows:

- Top Triangle:** 4 (left), 8 (top), 12 (right), 10 (center), +, - (inside)
- Middle-Left Triangle:** 4 (left), 5 (top), 8 (right), 4 (center), +, - (inside)
- Middle-Right Triangle:** 5 (left), 6 (top), 7 (right), 3 (center), +, - (inside)
- Bottom-Left Triangle:** 6 (left), 8 (top), 16 (right), 8 (center), +, - (inside)
- Bottom-Right Triangle:** 6 (left), 10 (top), 14 (right), 10 (center), +, - (inside)
- Bottom Triangle:** 6 (left), 3 (top), 7 (right), 4 (center), +, - (inside)

# Exploring Patterns Using Fact Triangles

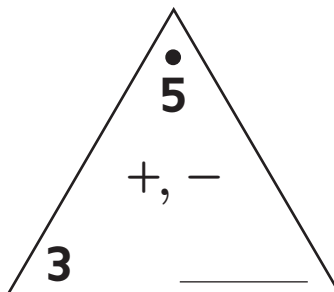


NAME \_\_\_\_\_

DATE \_\_\_\_\_

Complete the Fact Triangles.  
Then write the fact families.

①



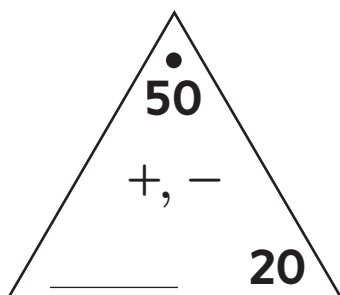
\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

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②



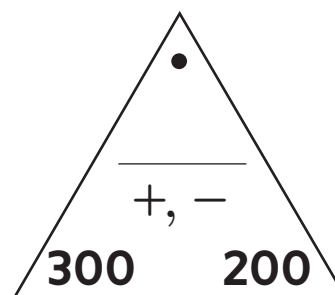
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③



\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

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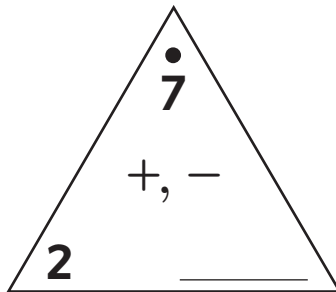
# Exploring Patterns Using Fact Triangles (continued)

**Lesson 7-2**

NAME \_\_\_\_\_ DATE \_\_\_\_\_

Complete the Fact Triangles.  
Then write the fact families.

4



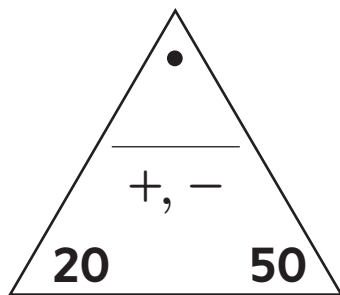
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5



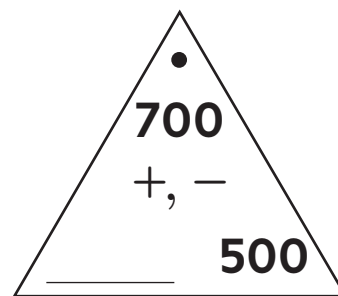
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6



\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

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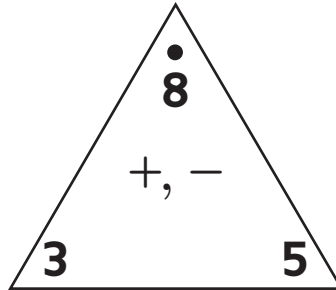
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## Fact Triangles

This Family Letter includes several pages of Fact Triangles. Each Fact Triangle includes three numbers that make up a fact family. Have your child cut out each Fact Triangle. Use these triangles like flash cards to practice addition and subtraction facts.

The number below the dot is the sum of the other two numbers. For example, 8 is the sum of 5 and 3.



You can help your child practice addition by covering the sum. Your child then adds the numbers that are not covered. For example, if you cover 8, your child adds 5 and 3 to find the sum, 8.

By covering one of the numbers at the bottom of the triangle, your child can practice subtracting the two uncovered numbers on the triangle from their sum. For example, if you cover 3, your child subtracts

5 from 8. If you cover 5, your child subtracts 3 from 8.

Covering one of the numbers at the bottom of the triangle can also be used to practice finding missing addends. For example, if you cover 3, your child determines the number that is added to 5 to get 8. In other words,  $5 + \square = 8$ .

Fact Triangles have two advantages over regular flash cards:

1. They reinforce the link between addition and subtraction.
2. They help simplify memorization by linking four facts together. Knowing a single fact means you know four facts.

$$5 + 3 = 8$$

$$3 + 5 = 8$$

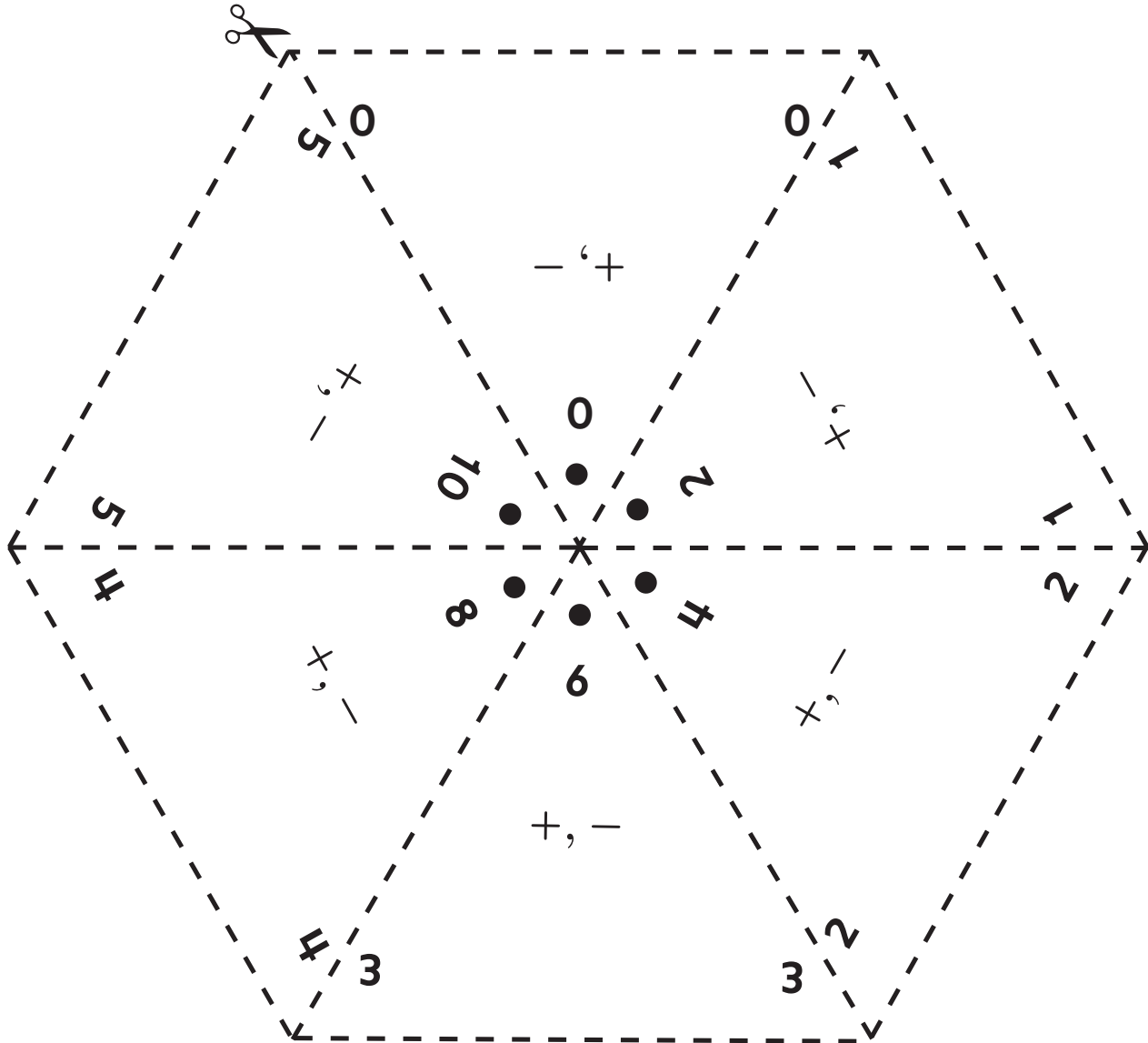
$$8 - 5 = 3$$

$$8 - 3 = 5$$

Save the Fact Triangles in an envelope or a plastic bag, and use them to continue practicing addition and subtraction facts with your child when you have time.

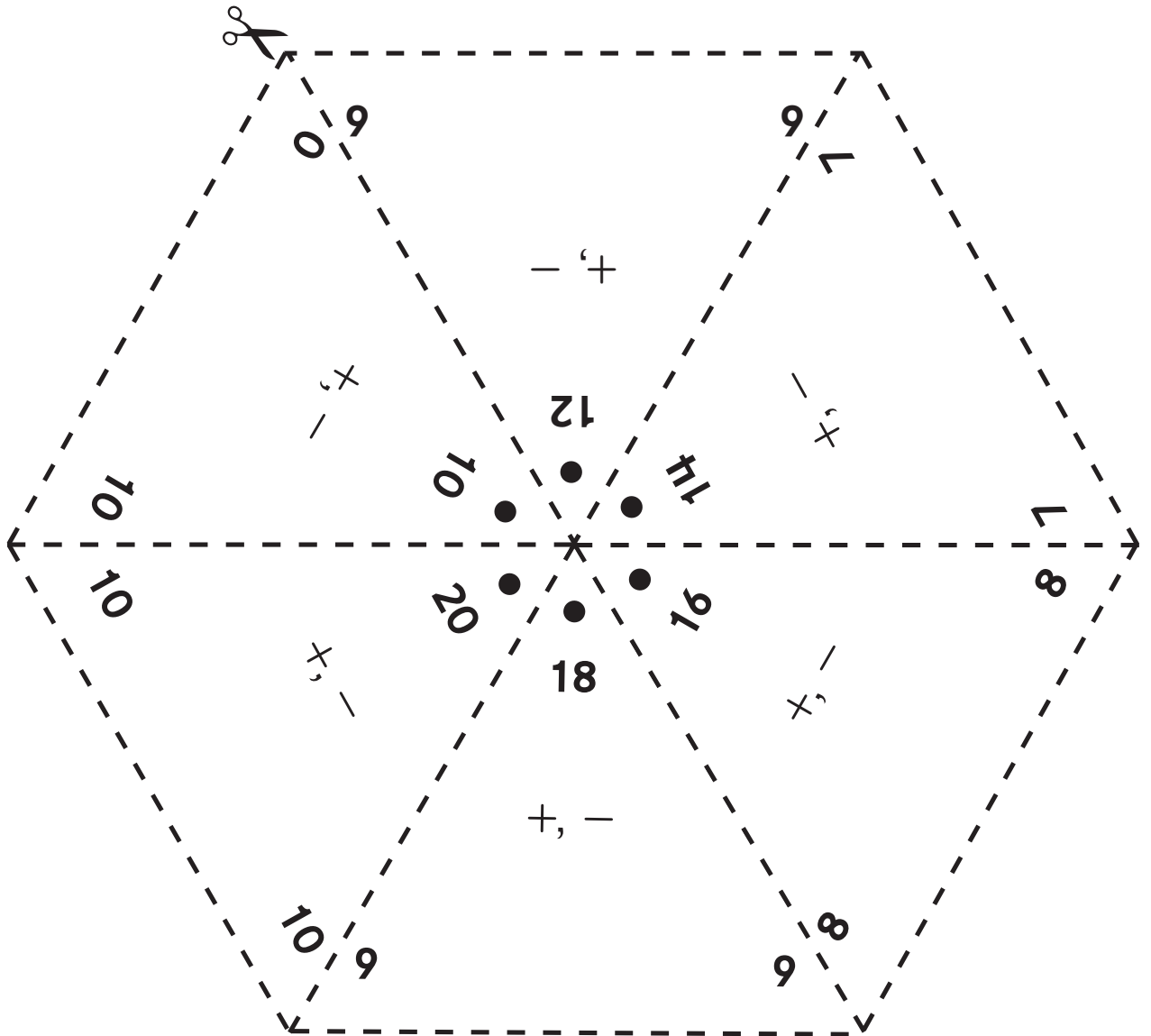
# Fact Triangles 1

Cut out the 6 triangles. Practice the addition and subtraction facts on these triangles with someone at home.



# Fact Triangles 2

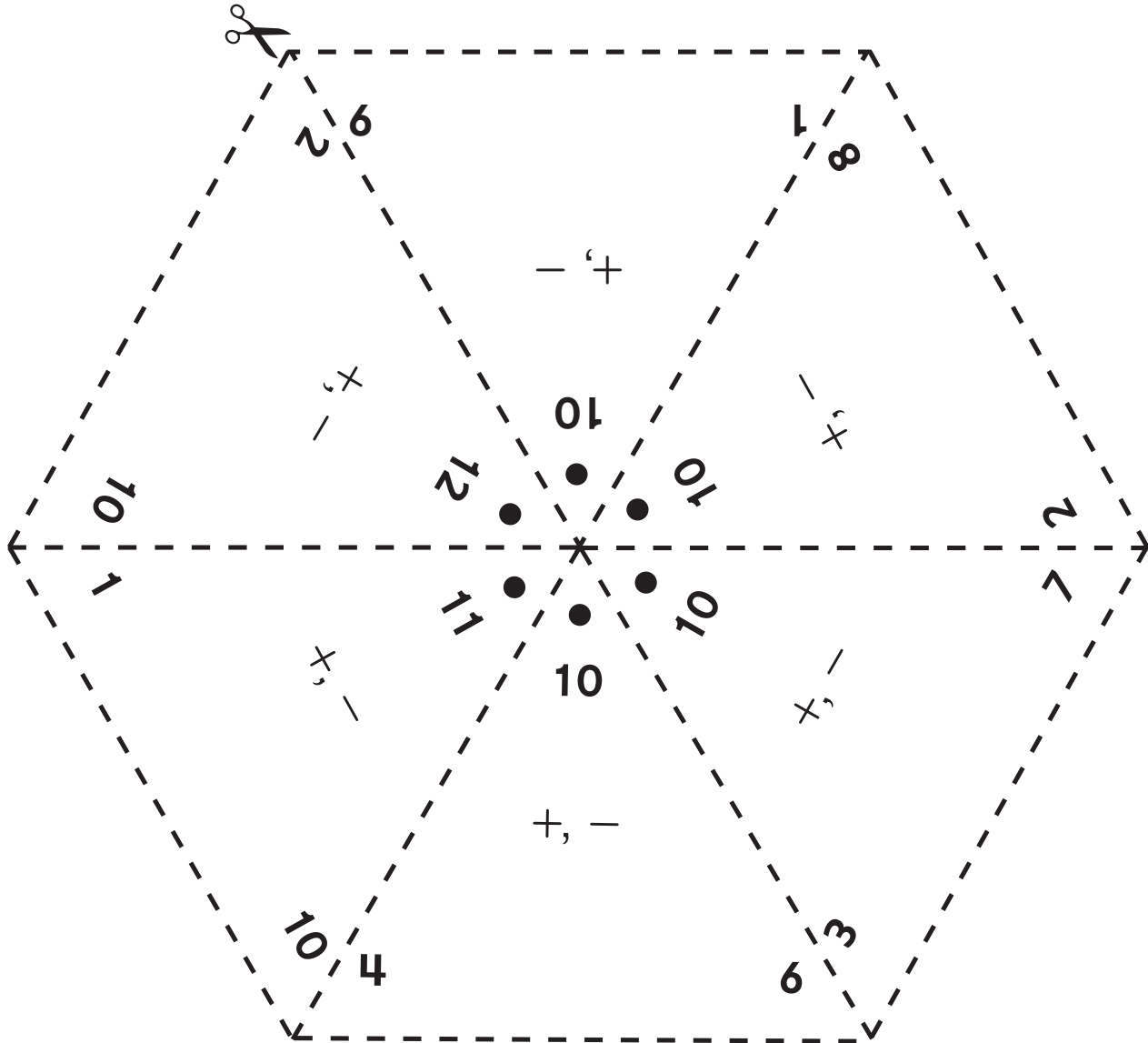
Cut out the 6 triangles. Practice the addition and subtraction facts on these triangles with someone at home.





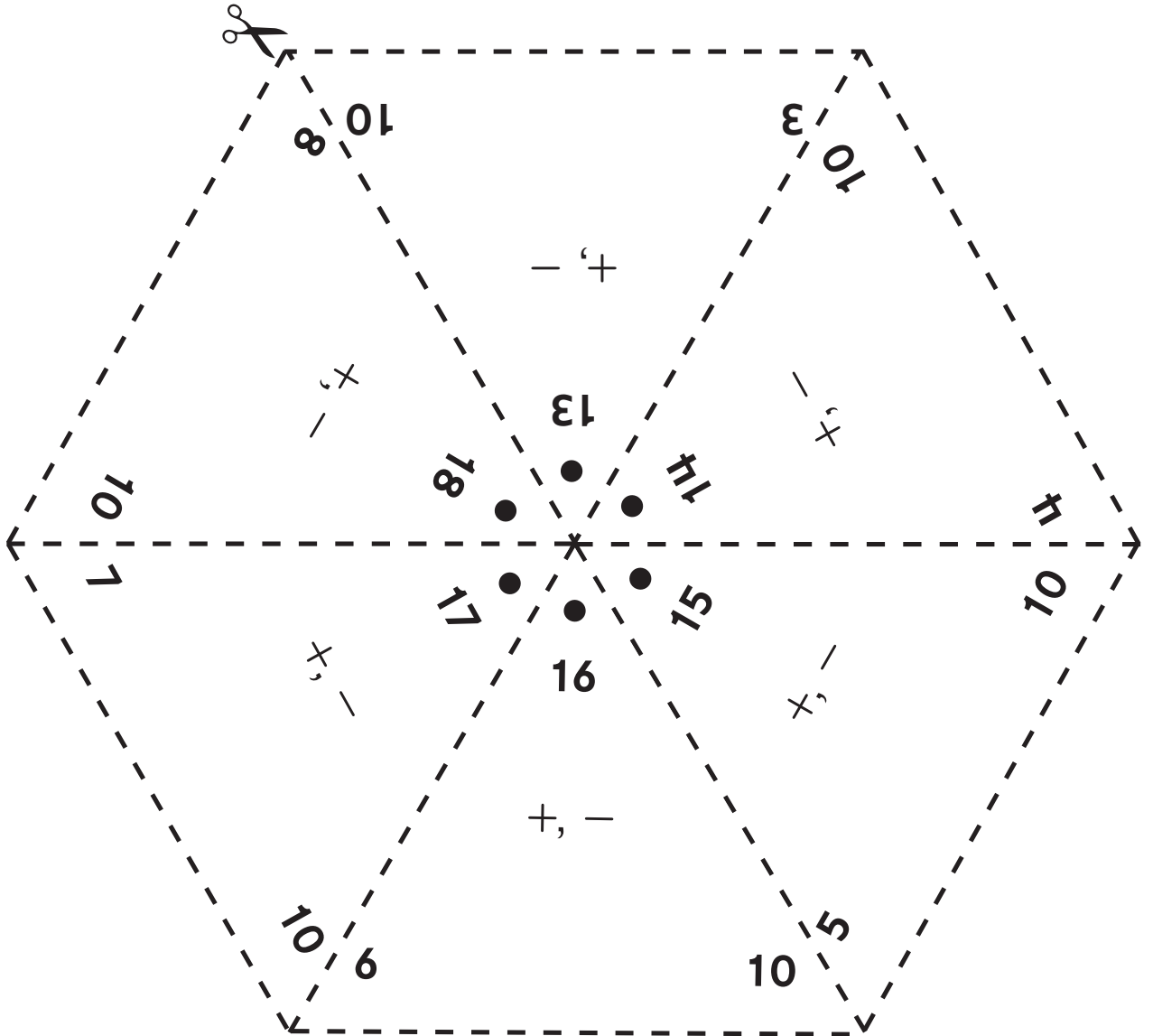
# Fact Triangles 3

Cut out the 6 triangles. Practice the addition and subtraction facts on these triangles with someone at home.



# Fact Triangles 4

Cut out the 6 triangles. Practice the addition and subtraction facts on these triangles with someone at home.



# Subtraction Bingo Mat A



NAME

DATE

3	6	1	10
4	5	4	2
4	0	5	9
1	7	8	2

# Subtraction Bingo Mat B



NAME \_\_\_\_\_

DATE \_\_\_\_\_

0	7	3	9
4	2	10	5
6	8	6	1
3	1	4	5

# Beat the Calculator

1	2
4	3

NAME

DATE

- Materials** Fact Triangles  
1 calculator
- Players** 1 “Caller,” 1 “Calculator,” and 1 “Brain”
- Skill** Mental addition
- Object of the Game** To add numbers faster than a player using a calculator

## Directions

- ① Mix the Fact Triangles. Place them facedown on the table.
- ② The Caller:
  - takes a Fact Triangle from the pile.
  - covers the sum.
  - says the fact *without* the sum.For example, “3 + 4 is equal to what?”
- ③ The Calculator solves the problem *with* a calculator. The Brain solves it *without* a calculator. The Caller decides who found the sum first.
- ④ Play about 10 rounds. Then trade roles.

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## Another Way to Play

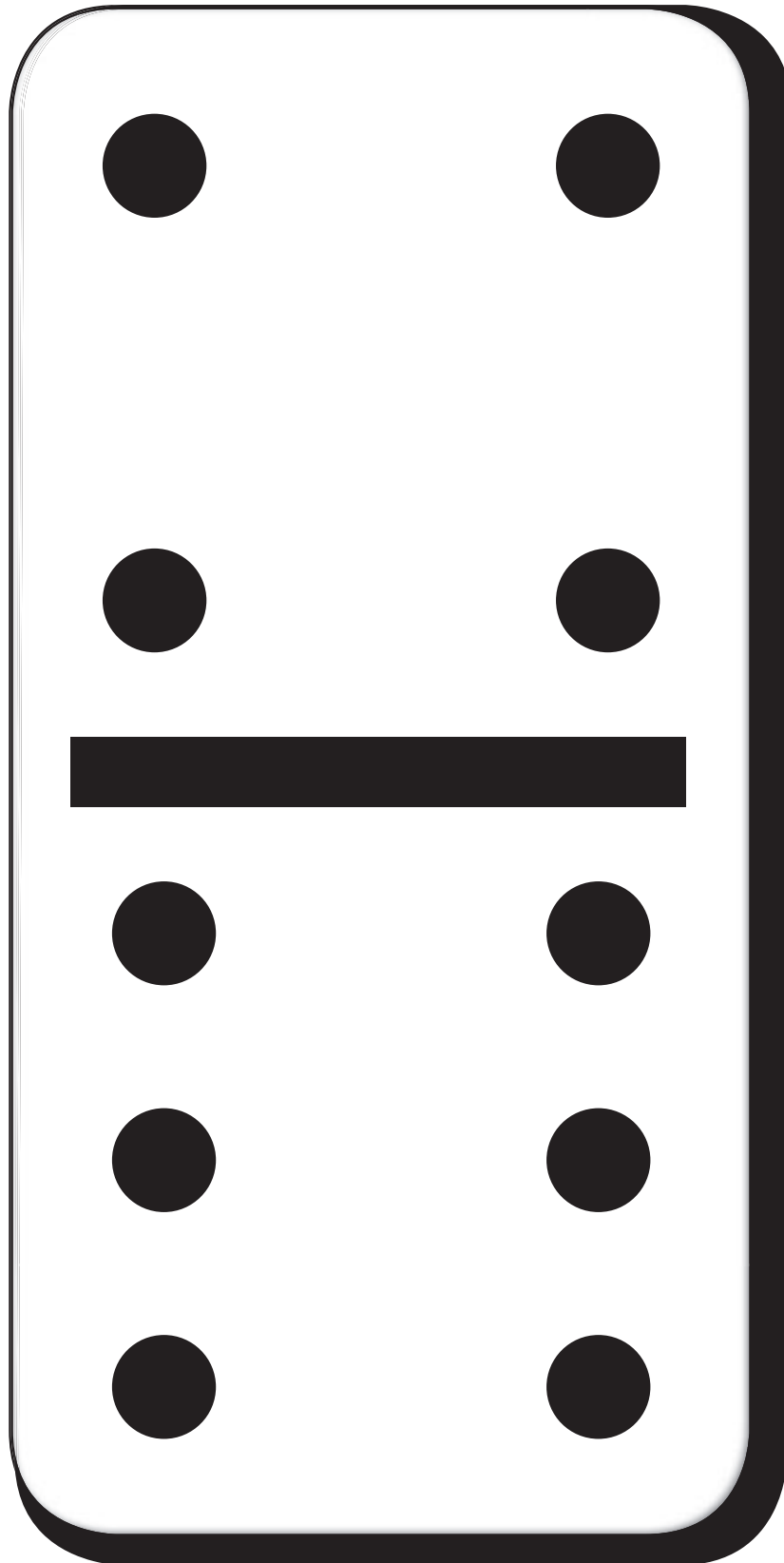
The Caller covers other numbers on the Fact Triangles. Players find the covered number. They can subtract to find the missing addend.

# 4|6 Domino



NAME

DATE



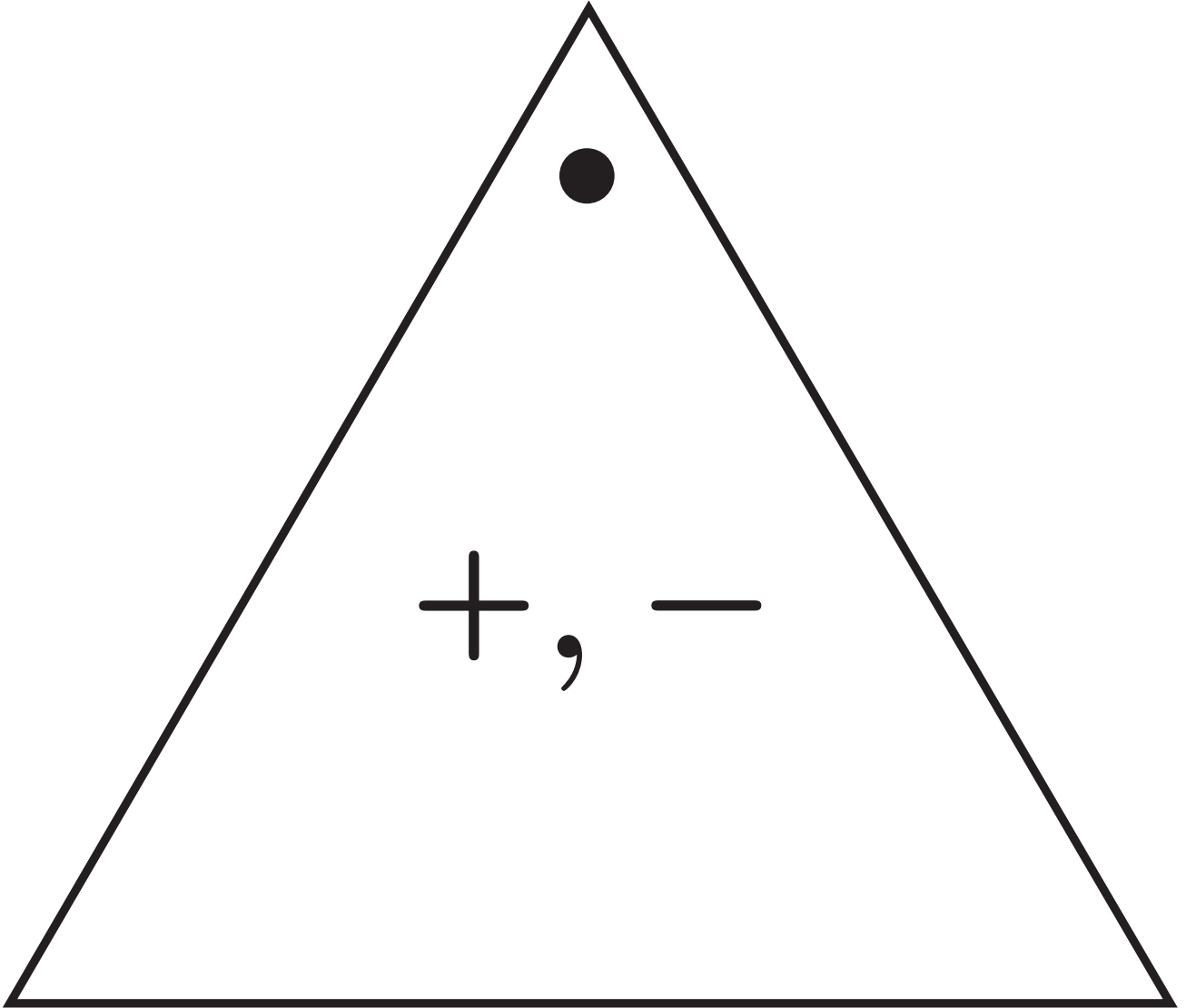
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# Fact Triangle



NAME

DATE



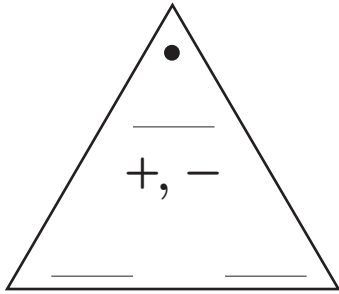
# Fact Families and Fact Triangles



NAME \_\_\_\_\_

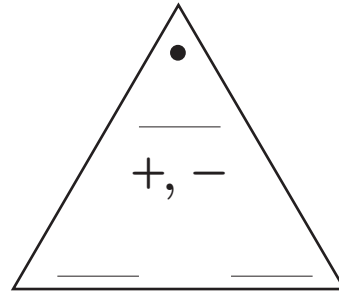
DATE \_\_\_\_\_

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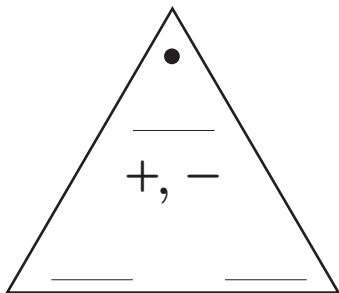
$$\begin{array}{r} \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \end{array}$$

②



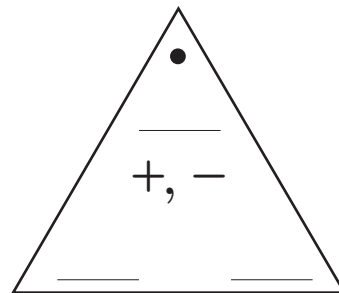
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③



$$\begin{array}{r} \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \end{array}$$

④



$$\begin{array}{r} \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ + \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \\ \_\_\_\_ - \_\_\_\_ = \_\_\_\_ \end{array}$$