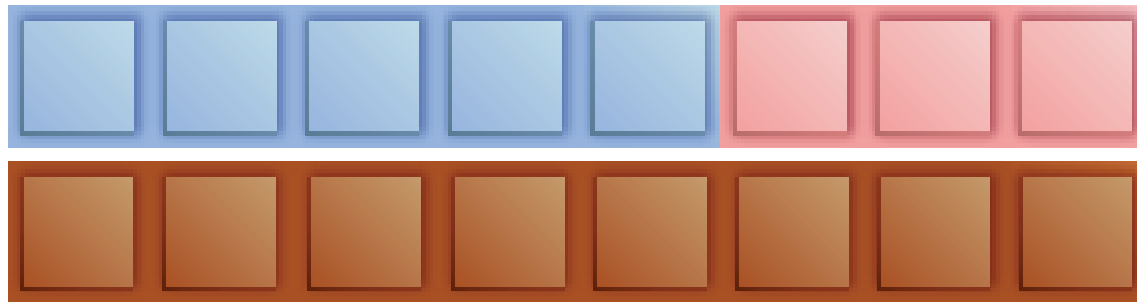
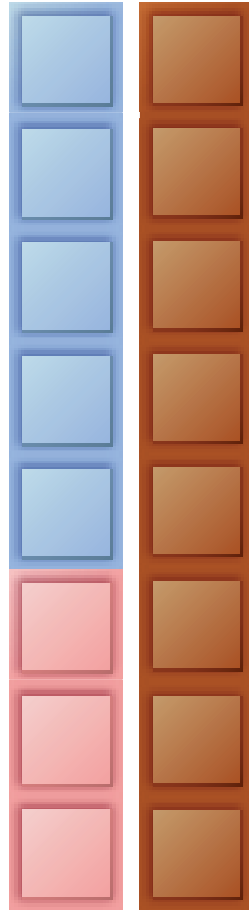


# Build, Write, Say



# Build, Write, Say



# Build, Write, Say

 Write

$$5 + 3 = 8$$

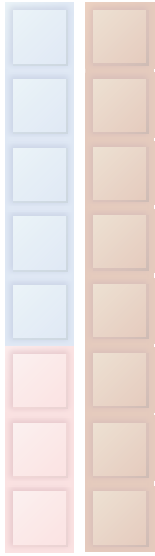
 Build



# Build, Write, Say



Build



Write

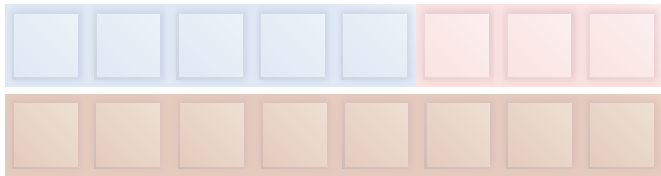
$$\begin{array}{r} 5 \\ + 3 \\ \hline 8 \end{array}$$



# Say

“Five plus three  
equals eight.”

 Build



 Write

$$5 + 3 = 8$$

# Addition Terms

$$5 + 3 = 8$$

addend

addend

**sum**



# Addition Terms

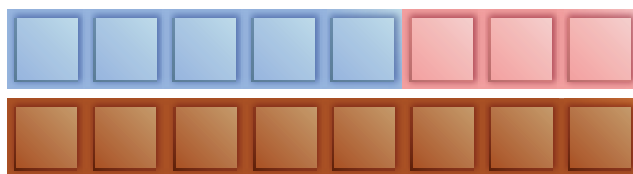
$$\begin{array}{r} 5 \\ + 3 \\ \hline 8 \end{array}$$

addend  
addend  
sum



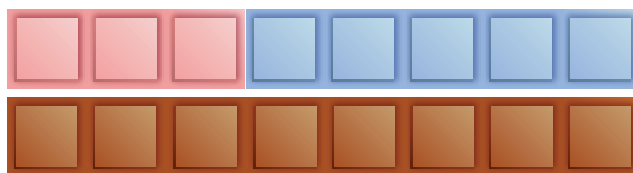
# Commutative Property of Addition

Changing the order of the addends does not change the sum.



$$5 + 3 = 8$$

or



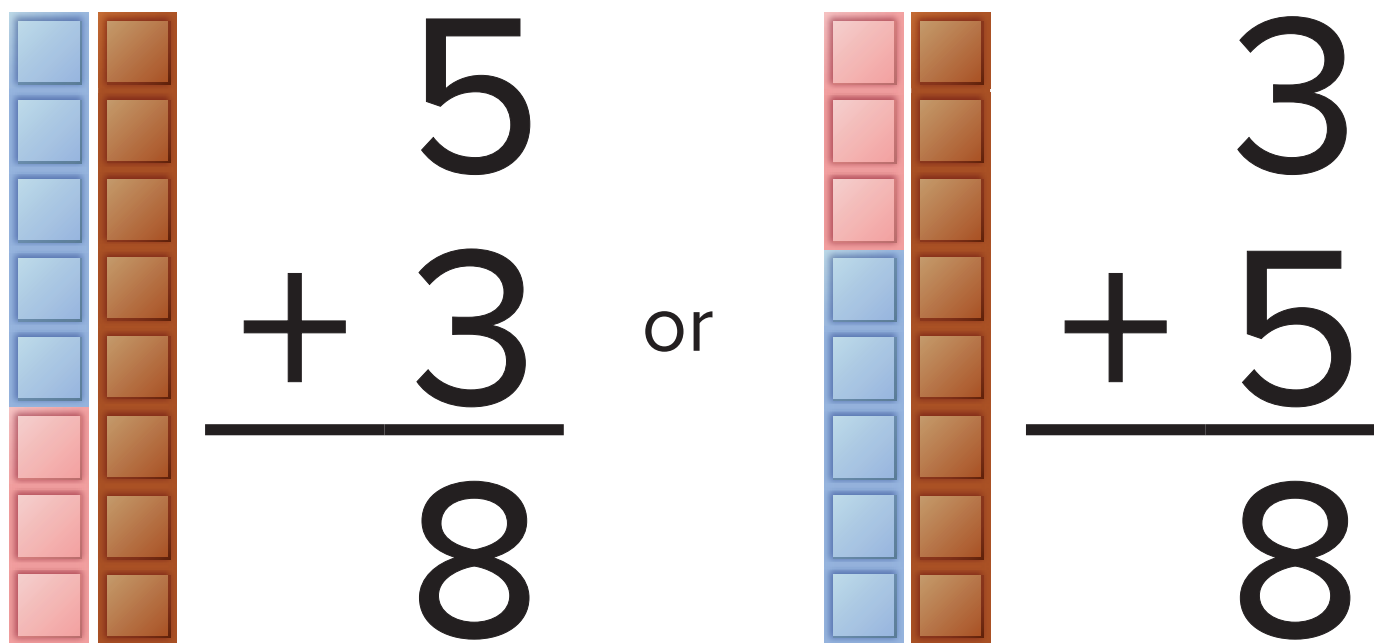
$$3 + 5 = 8$$





# Commutative Property of Addition

Changing the order of the addends does not change the sum.



## Addition: +2

**Build, Write, and Say  
the fact.**



$$5 + 2$$

“Five plus two.”

---

**Think:  
What number is  
2 greater than 5?**



**7**

---

**Build, Write, and Say  
the fact and answer.**



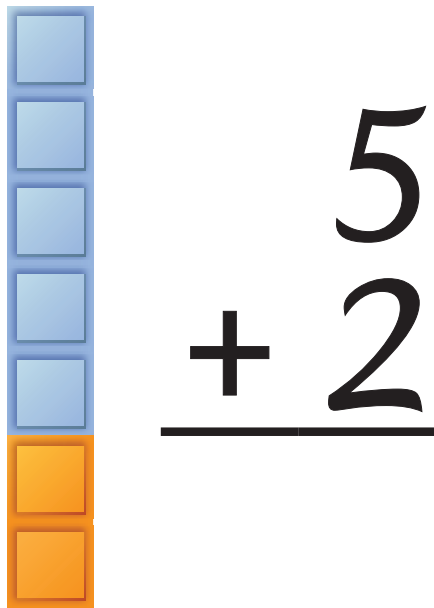
$$5 + 2 = 7$$

“Five plus two is the same as,  
or equal to, seven.”



# Addition: +2

Build, Write, and Say the fact.

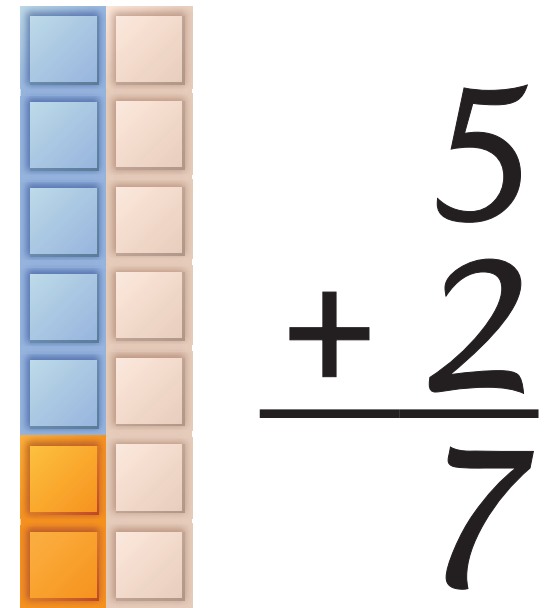


“Five plus two.”

Think:  
What number is  
2 greater than 5?



Build, Write, and Say the fact and answer.



“Five plus two is the same as,  
or equal to, seven.”



# Addition: +9

**Build, Write, and Say  
the fact.**

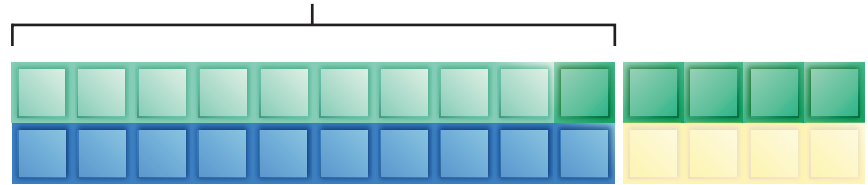


$$9 + 5$$

“Nine plus five.”

**9 wants to be 10.**

9 vacuums up 1.



**Build, Write, and Say  
the fact and answer.**

$$9 + 5 = 14$$



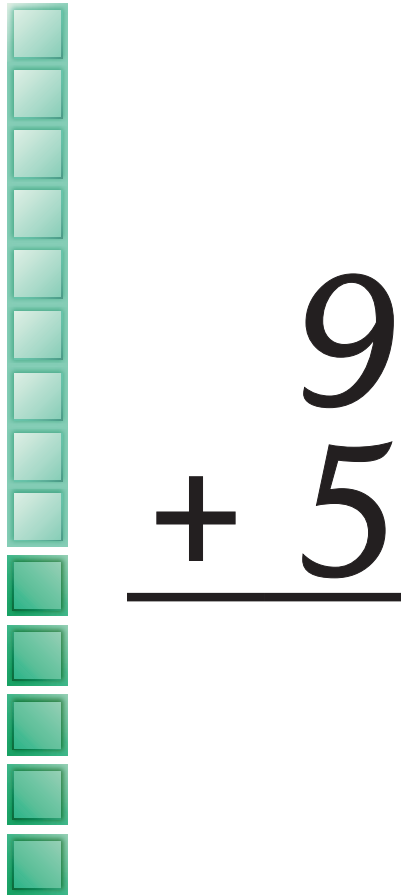
$$9 + 5 = 10 + 4 = 14$$

“Nine plus five is equal to ten plus four,  
or fourteen.”



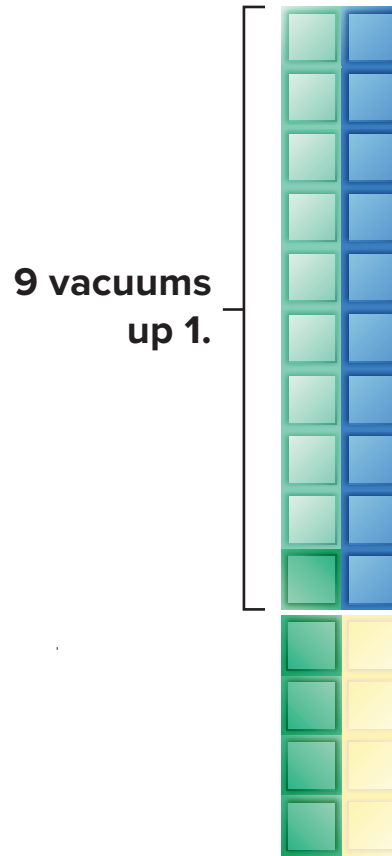
# Addition: +9

Build, Write, and Say the fact.



“Nine plus five.”

9 wants to be 10.



Build, Write, and Say the fact and answer.

$$9 + 5 = 14$$



$$\begin{array}{r} 9 \\ + 5 \\ \hline 14 \end{array} = \begin{array}{r} 10 \\ + 4 \\ \hline 14 \end{array}$$

“Nine plus five is equal to ten plus four, or fourteen.”



# Addition: +8

**Build, Write, and Say  
the fact.**

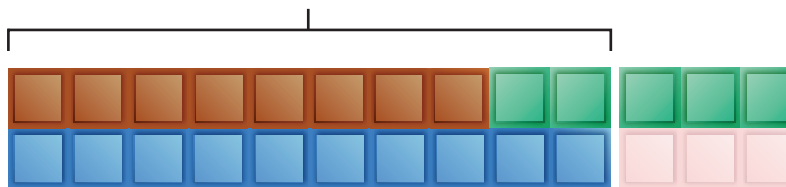


$$8 + 5$$

**“Eight plus five.”**

**8 wants to be 10.**

**8 vacuums up 2.**



**Build, Write, and Say  
the fact and answer.**

$$8 + 5 = 13$$



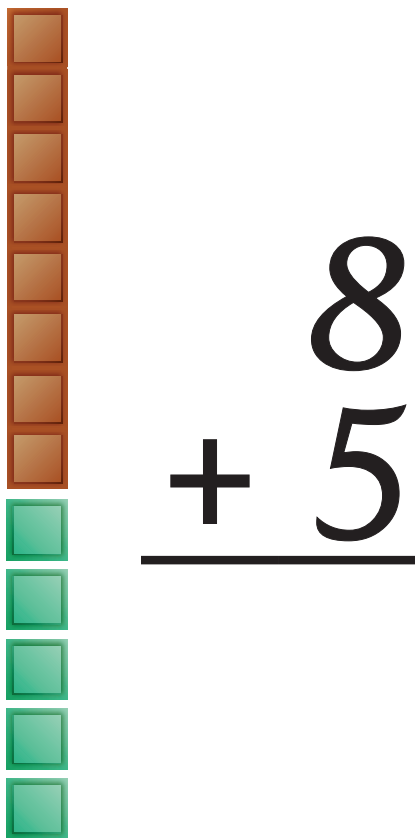
$$8 + 5 = 10 + 3 = 13$$

**“Eight plus five is equal to ten plus  
three, or thirteen.”**



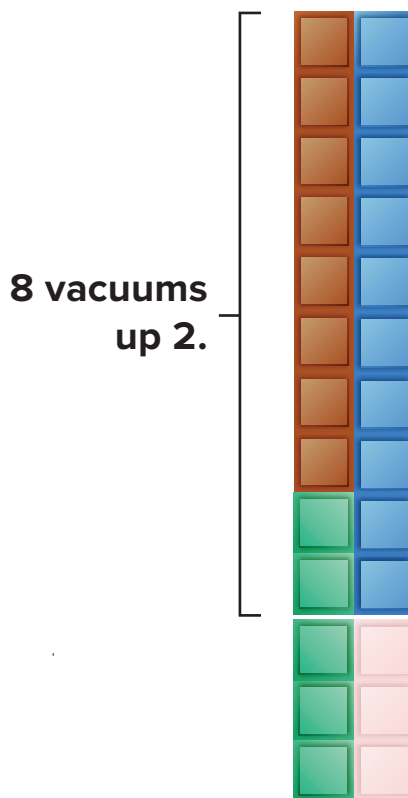
# Addition: +8

Build, Write, and Say the fact.



“Eight plus five.”

8 wants to be 10.



Build, Write, and Say the fact and answer.

$$8 + 5 = 13$$



$$\begin{array}{r} 8 \\ + 5 \\ \hline 13 \end{array} = \begin{array}{r} 10 \\ + 3 \\ \hline 13 \end{array}$$

“Eight plus five is equal to ten plus three, or thirteen.”



# Addition: Doubles

For use with facts  $5 + 5$ ,  $6 + 6$ ,  $7 + 7$

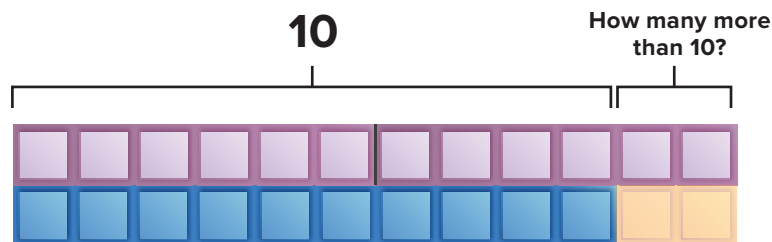
**Build, Write, and Say  
the fact.**



$$6 + 6$$

“Six plus six.”

**Look for 10.**



**Build, Write, and Say  
the fact and answer.**

$$6 + 6 = 12$$



$$6 + 6 = 10 + 2 = 12$$

“Six plus six is equal to  
ten plus two, or twelve.”

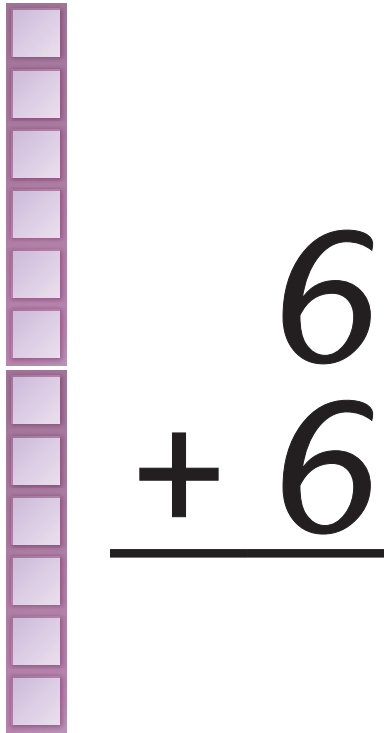




# Addition: Doubles

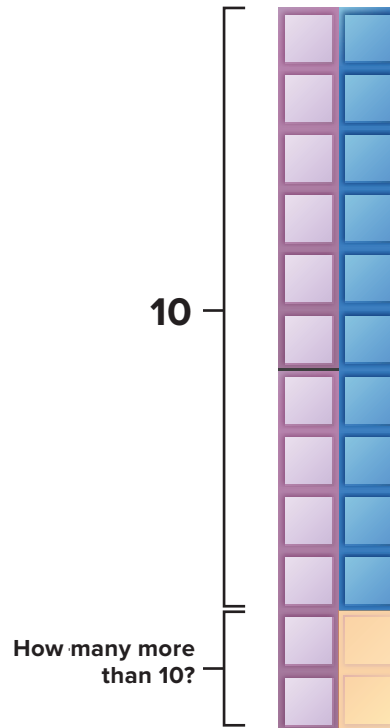
For use with facts  $5 + 5$ ,  $6 + 6$ ,  $7 + 7$

**Build, Write, and Say the fact.**



“Six plus six.”

**Look for 10.**



**Build, Write, and Say the fact and answer.**

$$6 + 6 = 12$$



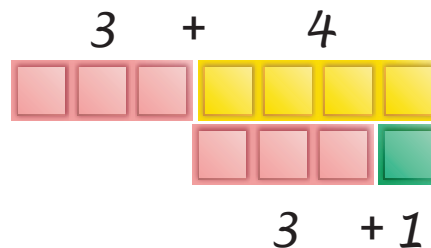
$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array} = \begin{array}{r} 10 \\ + 2 \\ \hline 12 \end{array}$$

“Six plus six is equal to ten plus two, or twelve.”



# Addition: Doubles + 1

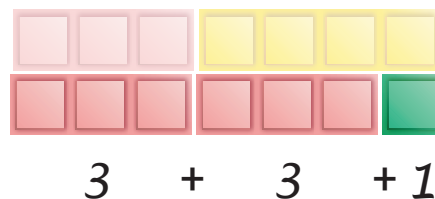
**Build, Write, and Say the fact.**  
**Decompose the greater addend.**



“Three plus four.”

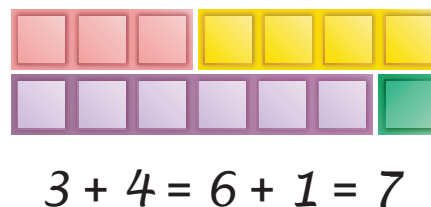
**Create the doubles fact + 1.**

$$3 + 4 = 3 + 3 + 1$$



**Build, Write, and Say the fact and answer.**

$$3 + 4 = 7$$

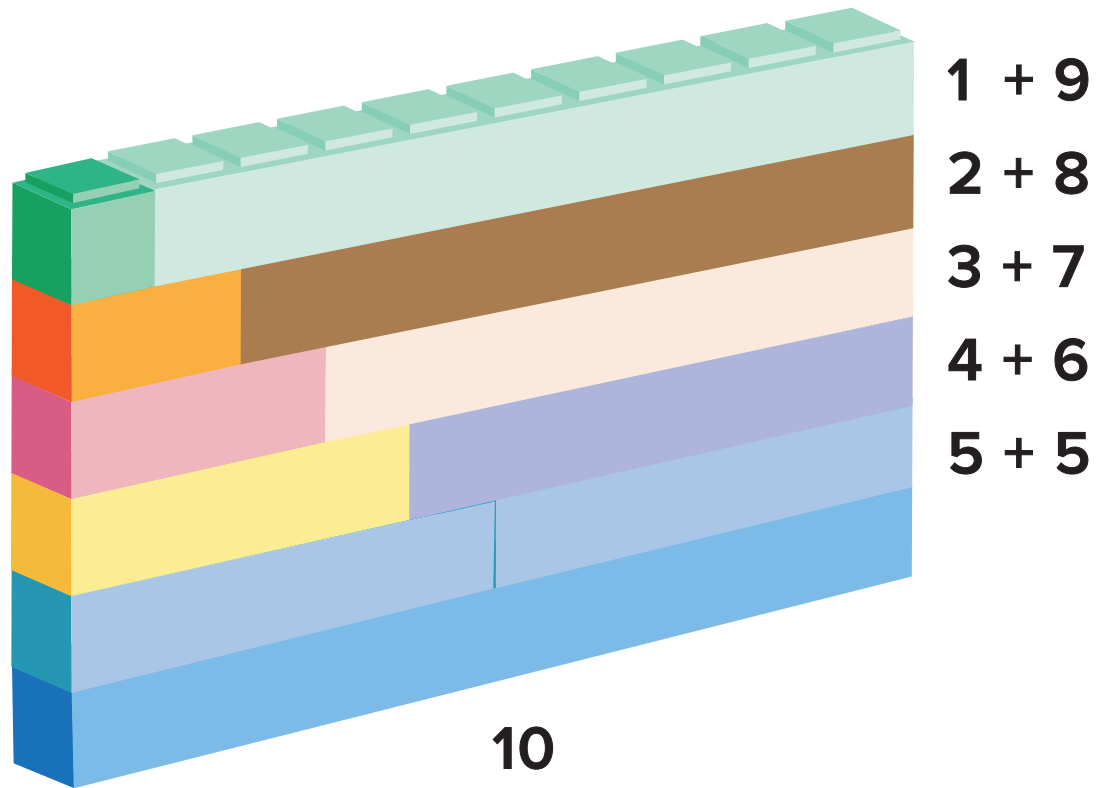


“Three plus four is equal to six plus one, or seven.”

💡 Replace the 6 + 1 with the 7-block as proficiency with the strategy increases.



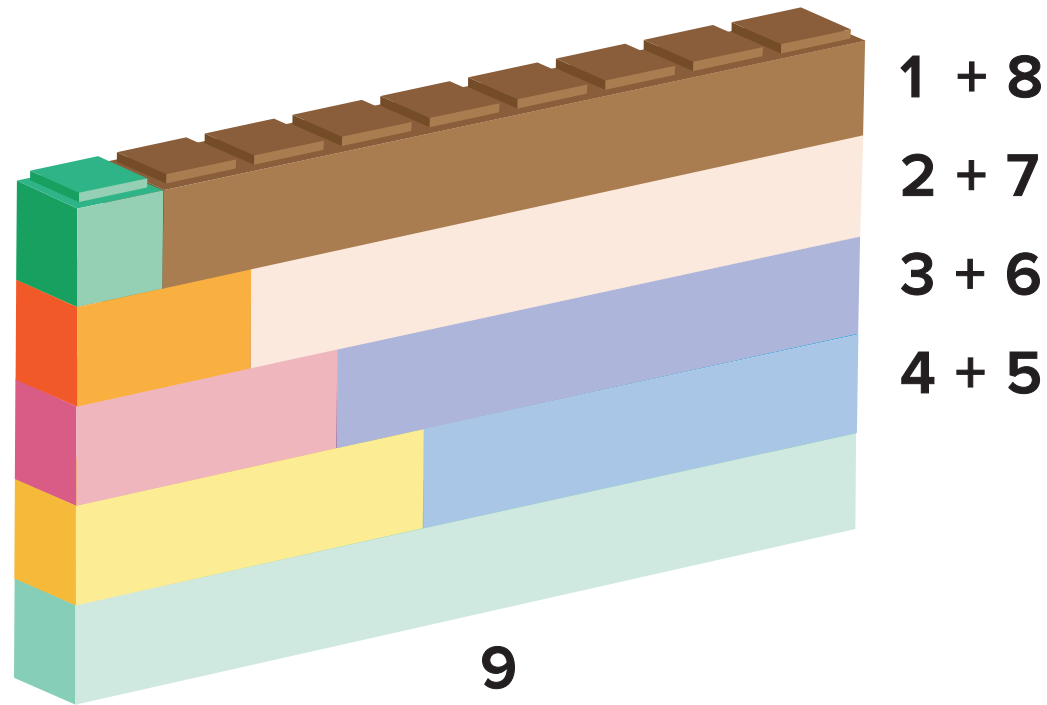
# Making 10



Each row has two addends that make 10.  
The bottom row is a 10-block that represents the sum, 10.

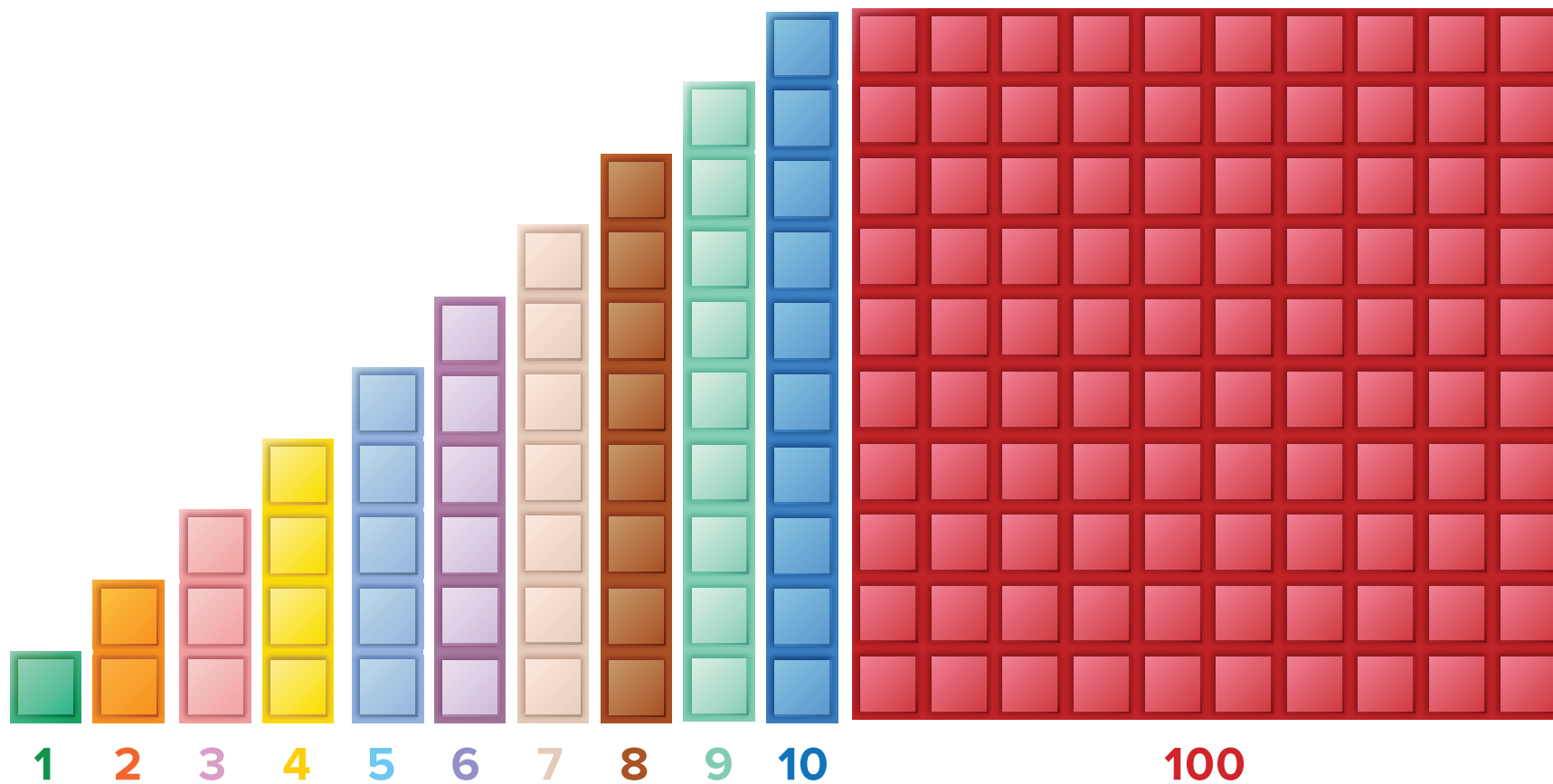


# Making 9



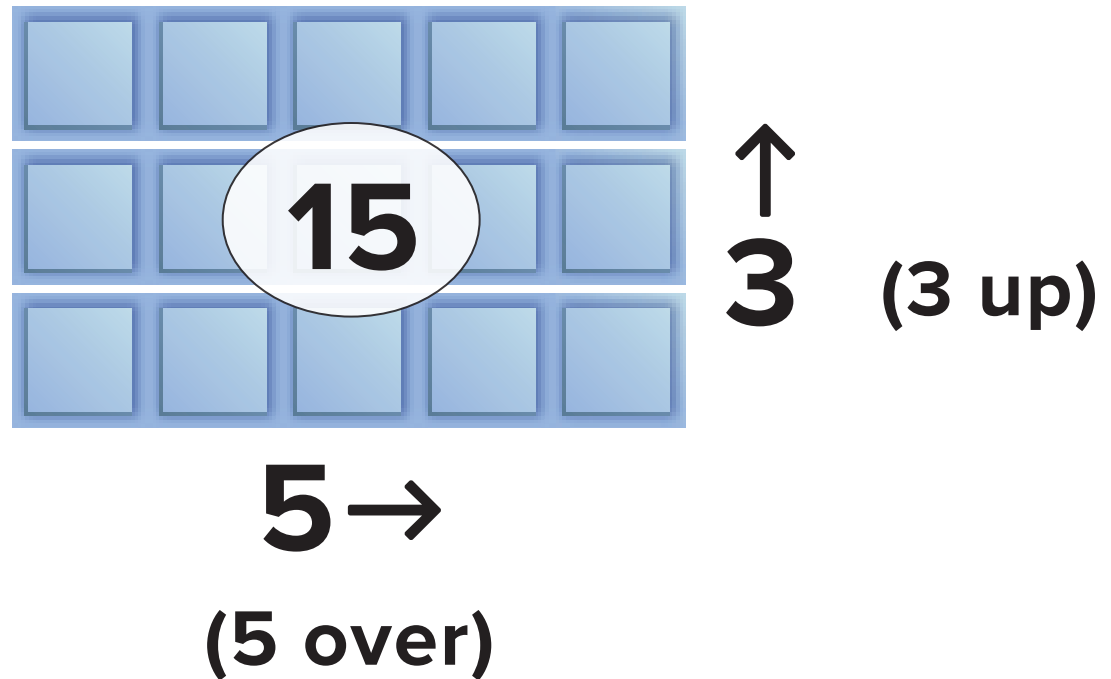
Each row has two addends that make 9.  
The bottom row is a 9-block that represents the sum, 9.

# Integer Block Colors and Values



# Rectangles, Factors, and Product

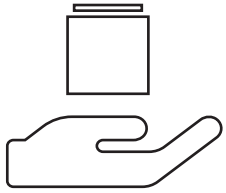
The rectangle shows  $5 \times 3 = 15$ .



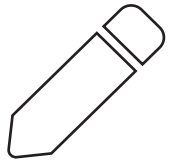
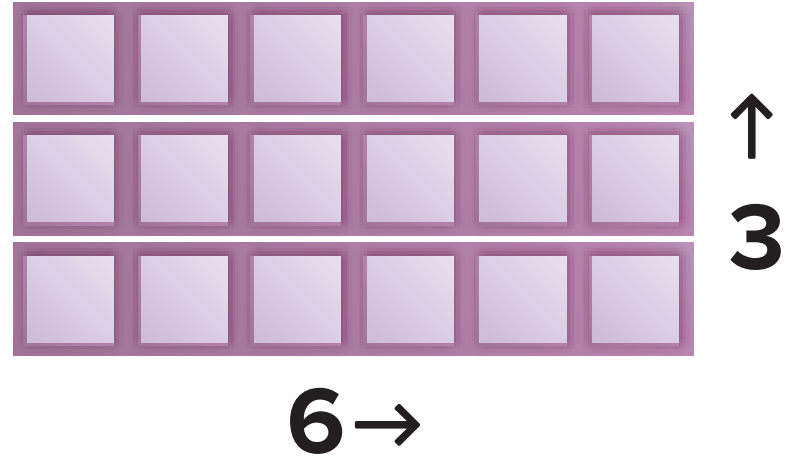
The factors are 5 and 3.  
The product is 15.



## Build, Write, Say



# Build



# Write

$$6 \times 3 = 18$$



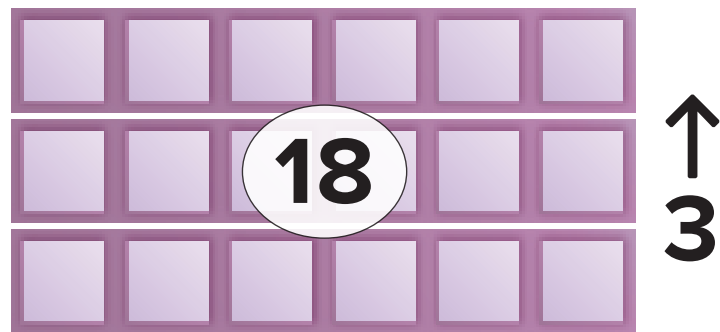
# Say

**“Six times three equals eighteen.”**



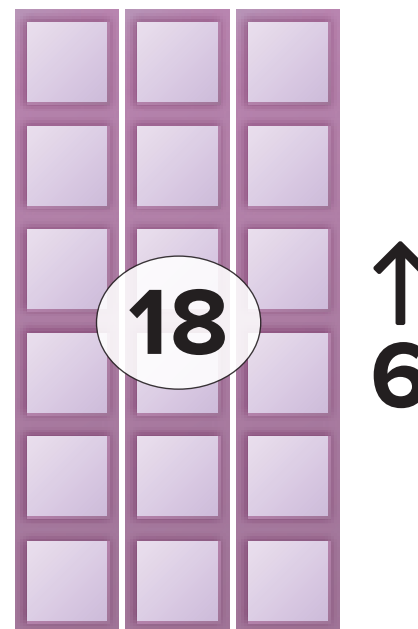
# Commutative Property of Multiplication

Changing the order of the factors does not change the product.



$6 \rightarrow$

$$6 \times 3 = 18$$



$3 \rightarrow$

$$3 \times 6 = 18$$

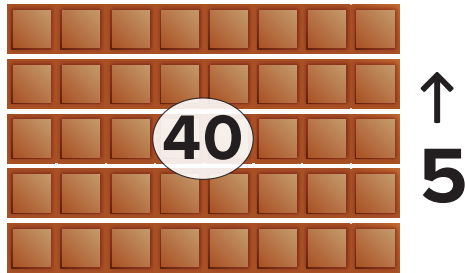




# Multiplication by 6

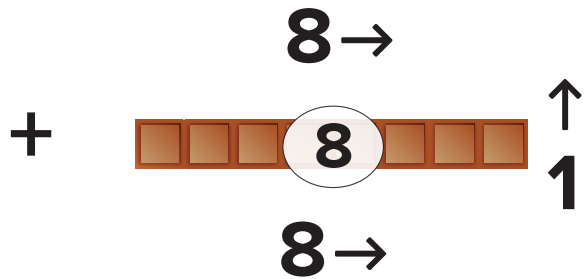
## To multiply any number by 6: Use the Fives Fact, Add One More Group

For example, to find  $8 \times 6$ :



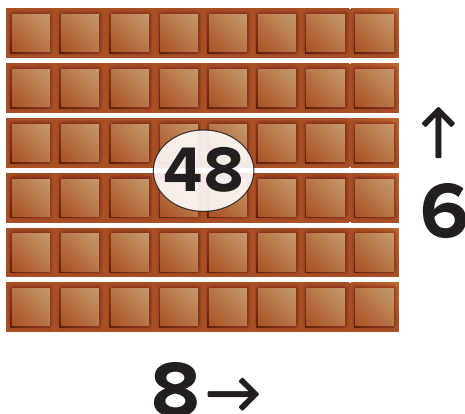
Start with the  
known fives fact.

$$8 \times 5 = 40$$



Add one  
more group.

$$8 \times 1 = 8$$



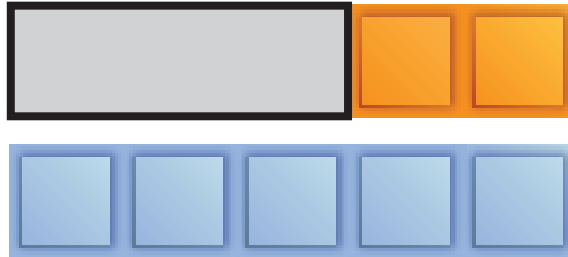
Add the products.

$$40 + 8 = 48$$

$$8 \times 6 = 48$$



## Solve for an Unknown



$$\boxed{x} + 2 = 5$$

“What number plus 2  
is the same as 5?”



# Decimal Blocks and Place Value



1 →

1 unit or 1.00

↑  
1



↑  
1

$\frac{1}{10}$  →

$\frac{1}{10}$  or 0.10



↑  
 $\frac{1}{10}$

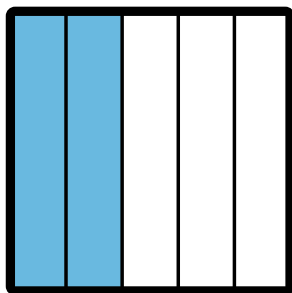
$\frac{1}{10}$  →

$\frac{1}{100}$  or 0.01

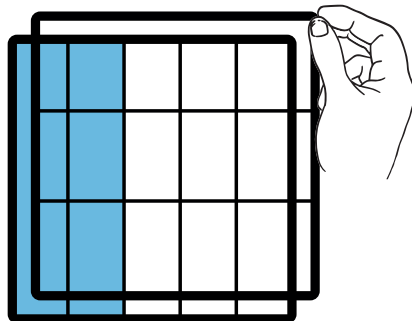
**Place values increase (multiply) by a factor of 10 moving to the left and decrease (divide) by a factor of 10 moving to the right.**



# Rule of Four



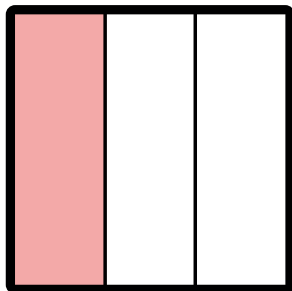
$$\frac{2}{5}$$



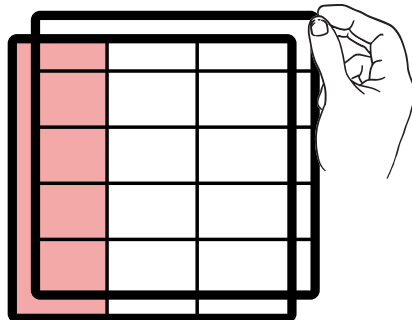
$$\frac{3}{3} \times \frac{2}{5} = \frac{6}{15}$$

**Make the first fraction.**

**Rotate the overlay of the second fraction 90° and place on top.**



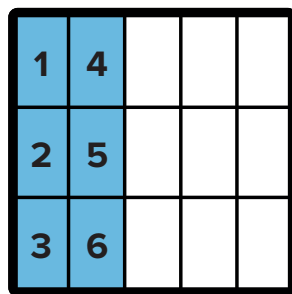
$$\frac{1}{3}$$



$$\frac{5}{5} \times \frac{1}{3} = \frac{5}{15}$$

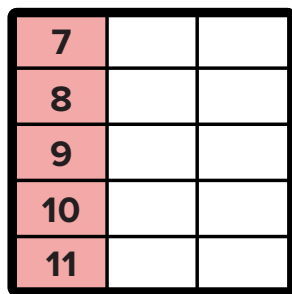
**Make the second fraction.**

**Rotate the overlay of the first fraction 90° and place on top.**



$$\frac{6}{15}$$

+



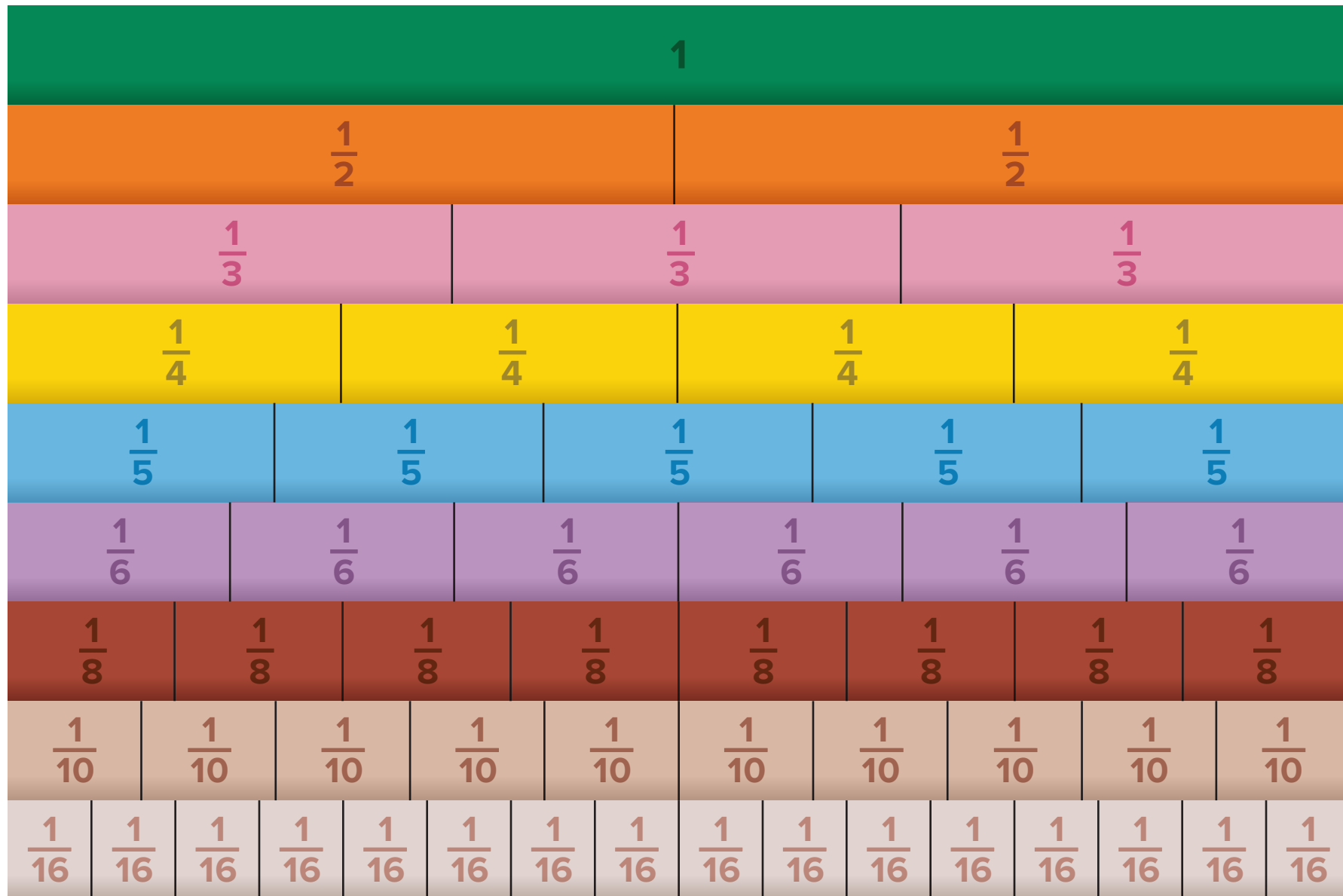
$$\frac{5}{15}$$

$$= \frac{11}{15}$$

**Complete the operation.**



# Comparing Fractions



## Understanding +0

$$2 + 0 = 2 \text{ and } 2 + 0 = 2$$

We have 2 dogs, and we did  
not get any more.



## Understanding +1

$$3 + 1 = 4 \text{ and } 1 + 3 = 4$$

What is 1 more than 3?

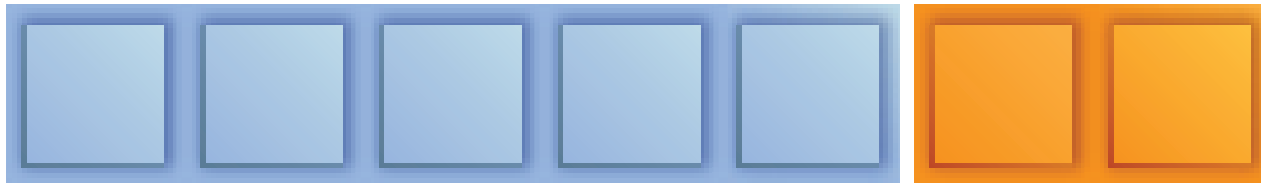
If you add 1 to 3,  
what do you have?



## Understanding +2

$$5 + 2 = 7 \text{ and } 2 + 5 = 7$$

Which number is 2 greater than 5?



**Smoosh** the blocks together.

