



THE CATHOLIC ACADEMY  
OF STAMFORD

## 2024-2025 Supply List

### Incoming Fourth Grade

- 1 Package of Filler Paper, Wide Ruled
- 2 Composition Notebooks, Marble Cover, Wide Ruled (one for math, one for writing)
- 1 Three Subject Notebook, Wide Ruled (for religion, social studies, and science)
- 5 Two Pocket Plastic Folders in different colors (a separate folder for unfinished work, reading, social studies, math, and religion)
- 1 Pack of Index Cards, 3" x 5", Ruled, 100/Pk, White
- 3 Book Covers, Jumbo, Stretchable (to cover math, and two reading)
- 2 Dozen #2 Pencils
- 2 Erasable Pens (Blue or Black only)
- 1 Large Glue Stick
- 2 Dry Erase Markers, Chisel Tip, Low Odor
- 1 Pair of 5" Scissors, Pointed Tip
- 1 Pencil Sharpener
- 1 Zippered Pencil Case, Fabric
- 1 Large Pink Eraser
- 1 Box of Colored Pencils, 12/Set
- 1 Box of Crayons, 24/Box
- 2 Highlighters, Chisel Tip
- 1 12" Plastic Ruler, Inch & Cm
- 4 Boxes Facial Tissues\*
- 2 Rolls of Paper Towels\*
- 2 Packages of Baby Wipes
- 1 Container of Disinfectant Wipes
- 1 Large Bottle of Hand Sanitizer
- 1 Pair Earbuds or Headphones
- 1 Wired Mouse

\*Students with a last name beginning with the letters A-L, please bring in 4 boxes of facial tissues and 2 rolls of paper towels in August. Students with the last name beginning with the letters M-Z, please bring in 4 boxes of facial tissues and 2 rolls of paper towels in January.

#### **Spanish**

- 1 two-pocket folder
- 1 50-Sheet Composition Notebook

#### **Music**

- 1 two-pocket folder
- 1 Composition Notebook

#### **Art**

- Metallic Sharpies



THE CATHOLIC ACADEMY  
OF STAMFORD

## **Summer Reading Assignments**

### **Incoming Grade 4 Students**

### **Reading**

Choose one of the books listed below and complete one of the reports.

1. Frindle by Andrew Clements
2. Pippi Longstocking by Astrid Lindgren
3. The Hundred Dresses by Eleanor Estes
4. Stuart Little by E.B. White
5. The Mouse and the Motorcycle by Beverly Cleary
6. Harriet the Spy by Louise Fitzhugh
7. From the Mixed Up Files of Mrs. Basil E. Frankweiler by E.L. Konigsburg
8. Charlie and the Chocolate Factory by Roald Dahl

Choose one of the following reports to complete:

1. Write a book report that tells about the plot (the story events) of the story. Be sure to include all of the events of the story in different paragraphs.  
Please write in paragraph form and include the title and author in the first paragraph.
2. Write a report about one of the main characters of the story. Describe the character and how he/she interacts with others in the story. Explain what the character does and thinks about some of the events in the book. Please write in paragraph form and include the title and author in the first paragraph.



THE CATHOLIC ACADEMY  
OF STAMFORD

## **Summer Math Assignments**

### **Incoming Grade 4 Students**

#### **Math**

Please complete the following math worksheets:

1. Add and Subtract without Regrouping
2. Addition and Subtraction Facts
3. Compare Whole Numbers
4. Division Facts
5. Graphing Sense
6. Hundreds
7. Identify Fractions
8. Meaning of Multiplication
9. Multiplication Facts
10. Multiply with 10, 11, and 12
11. Recognize and Count Money
12. Record and Organize Data
13. Relate Multiplication and Division
14. Related Facts
15. Understand Division

# Add and Subtract without Regrouping

Add:  $2110 + 3022 = \underline{\quad ? \quad}$

Align. Add. Start with the ones.

Add ones.	Add tens.	Add hundreds.	Add thousands.
$\begin{array}{r} 2110 \\ + 3022 \\ \hline 2 \end{array}$	$\begin{array}{r} 2110 \\ + 3022 \\ \hline 32 \end{array}$	$\begin{array}{r} 2110 \\ + 3022 \\ \hline 132 \end{array}$	$\begin{array}{r} 2110 \\ + 3022 \\ \hline 5132 \end{array}$

Subtract:  $5867 - 4536 = \underline{\quad ? \quad}$

Align. Subtract. Start with the ones.

Subtract ones.	Subtract tens.	Subtract hundreds.	Subtract thousands.
$\begin{array}{r} 5867 \\ - 4536 \\ \hline 1 \end{array}$	$\begin{array}{r} 5867 \\ - 4536 \\ \hline 31 \end{array}$	$\begin{array}{r} 5867 \\ - 4536 \\ \hline 331 \end{array}$	$\begin{array}{r} 5867 \\ - 4536 \\ \hline 1331 \end{array}$

Find the sum.

- |  |  |   |  |   |  |
|--|--|---|--|---|--|
| 1. $\begin{array}{r} 42 \\ + 33 \\ \hline \end{array}$ | 2. $\begin{array}{r} 128 \\ + 820 \\ \hline \end{array}$ | 3. $\begin{array}{r} 173 \\ + 13 \\ \hline \end{array}$ | 4. $\begin{array}{r} 8317 \\ + 1222 \\ \hline \end{array}$ | 5. $\begin{array}{r} 8117 \\ + 782 \\ \hline \end{array}$ | 6. $\begin{array}{r} 6416 \\ + 2103 \\ \hline \end{array}$ |
|--|--|---|--|---|--|

7.  $15 + 22 + 50 + 11$     8.  $23 + 11 + 34 + 21$     9.  $300 + 240 + 159$

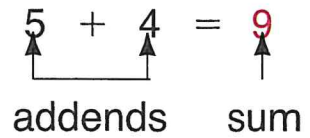
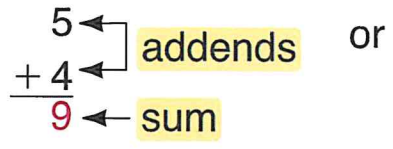
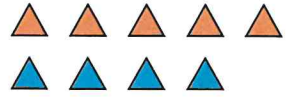
Find the difference.

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 10. $\begin{array}{r} 53 \\ - 21 \\ \hline \end{array}$ | 11. $\begin{array}{r} 279 \\ - 151 \\ \hline \end{array}$ | 12. $\begin{array}{r} 8576 \\ - 1423 \\ \hline \end{array}$ | 13. $\begin{array}{r} 878 \\ - 843 \\ \hline \end{array}$ | 14. $\begin{array}{r} 6495 \\ - 3122 \\ \hline \end{array}$ | 15. $\begin{array}{r} 5986 \\ - 5082 \\ \hline \end{array}$ |
|---|---|---|---|---|---|

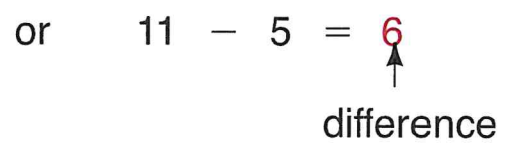
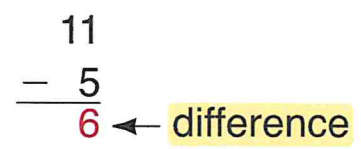
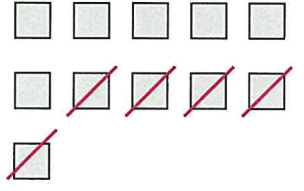
16.  $67 - 5$                       17.  $175 - 25$                       18.  $438 - 16$

# Addition and Subtraction Facts

▶ Add:  $5 + 4 = \underline{\quad ? \quad}$



▶ Subtract:  $11 - 5 = \underline{\quad ? \quad}$



**Remember:**  
 $5 + 4 = 9$  is a number sentence for addition.  
 $11 - 5 = 6$  is a number sentence for subtraction.

**Add or subtract. Watch the signs.**

- |   |  |   |   |   |   |
|---|--|---|---|---|---|
| 1. $\begin{array}{r} 8 \\ +8 \\ \hline \end{array}$   | 2. $\begin{array}{r} 4 \\ +9 \\ \hline \end{array}$  | 3. $\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$  | 4. $\begin{array}{r} 6 \\ +5 \\ \hline \end{array}$   | 5. $\begin{array}{r} 14\text{¢} \\ -7\text{¢} \\ \hline \end{array}$  | 6. $\begin{array}{r} 12\text{¢} \\ -4\text{¢} \\ \hline \end{array}$  |
| 7. $\begin{array}{r} 7 \\ +6 \\ \hline \end{array}$   | 8. $\begin{array}{r} 16 \\ -7 \\ \hline \end{array}$ | 9. $\begin{array}{r} 0 \\ +7 \\ \hline \end{array}$   | 10. $\begin{array}{r} 13 \\ -4 \\ \hline \end{array}$ | 11. $\begin{array}{r} 7\text{¢} \\ +9\text{¢} \\ \hline \end{array}$  | 12. $\begin{array}{r} 14\text{¢} \\ -6\text{¢} \\ \hline \end{array}$ |
| 13. $\begin{array}{r} 15 \\ -8 \\ \hline \end{array}$ | 14. $\begin{array}{r} 9 \\ +9 \\ \hline \end{array}$ | 15. $\begin{array}{r} 11 \\ -8 \\ \hline \end{array}$ | 16. $\begin{array}{r} 9 \\ +6 \\ \hline \end{array}$  | 17. $\begin{array}{r} 18\text{¢} \\ -9\text{¢} \\ \hline \end{array}$ | 18. $\begin{array}{r} 8\text{¢} \\ +6\text{¢} \\ \hline \end{array}$  |
| 19. $17 - 8$  | 20. $6 + 6$  | 21. $15 - 7$  | 22. $6\text{¢} + 7\text{¢}$                           | 23. $3\text{¢} + 8\text{¢}$   |   |

# Compare Whole Numbers

$>$  means “is greater than”

$<$  means “is less than”

$=$  means “is equal to”

To compare numbers:

- Align the digits by place value.
 

6453	
6459	
- Start at the left. Compare the digits in the greatest place.
 

6453		6 = 6
6459		
- If these digits are the same, compare the next digits.
 

6453		4 = 4
6459		
- Keep comparing digits until you find two digits that are *not* the same.
 

6453		5 = 5
6459		9 > 3

So  $6459 > 6453$ . You could also say  $6453 < 6459$ .

Study this example.

$$423 \quad ? \quad 2423$$

423	
2423	

$$0 < 2$$

**Think.**

There are no thousands in 423.

So  $423 < 2423$     or     $2423 > 423$ .

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

1.  $57 \underline{=} 57$

2.  $65 \underline{?} 62$

3.  $48 \underline{?} 56$

4.  $82 \underline{?} 28$

5.  $325 \underline{?} 523$

6.  $649 \underline{?} 841$

7.  $127 \underline{?} 134$

8.  $525 \underline{?} 522$

9.  $6241 \underline{?} 9246$

10.  $7983 \underline{?} 7983$

11.  $9015 \underline{?} 9012$

12.  $2704 \underline{?} 2714$

13.  $8619 \underline{?} 8617$

14.  $1844 \underline{?} 1846$

# Division Facts

▶ Divide:  $35 \div 5 = \underline{\quad ? \quad}$

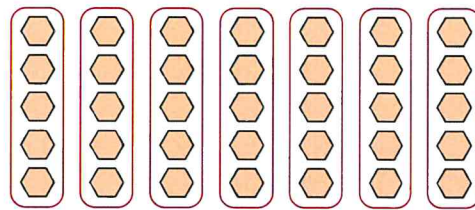
Think

$$\begin{array}{r} \underline{\quad ? \quad} \times 5 = 35 \\ 7 \times 5 = \end{array}$$

So  $\begin{array}{c} 35 \\ \uparrow \\ \text{dividend} \end{array} \div \begin{array}{c} 5 \\ \uparrow \\ \text{divisor} \end{array} = \begin{array}{c} 7 \\ \uparrow \\ \text{quotient} \end{array}$

or

$\begin{array}{r} 7 \leftarrow \text{quotient} \\ \text{divisor} \rightarrow 5 \overline{)35} \leftarrow \text{dividend} \end{array}$



35 in all  
5 in each group

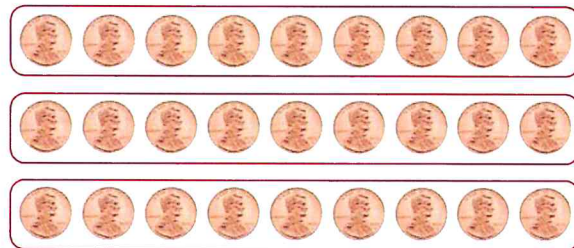
Remember:  $35 \div 5 = 7$   
is a **division sentence**.

▶ Find the quotient:  $27\text{¢} \div 3 = \underline{\quad ? \quad}$

Think

$$3 \times \underline{\quad ? \quad} = 27\text{¢}$$

So  $27\text{¢} \div 3 = 9\text{¢}$  or  $\begin{array}{r} 9\text{¢} \\ 3 \overline{)27\text{¢}} \end{array}$

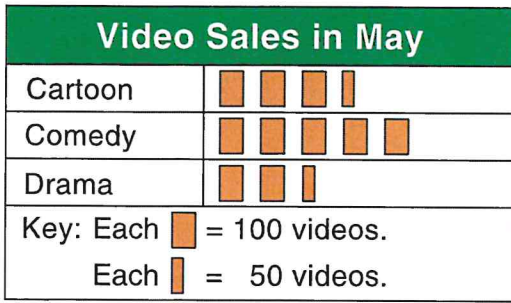


27¢ in all  
3 equal groups

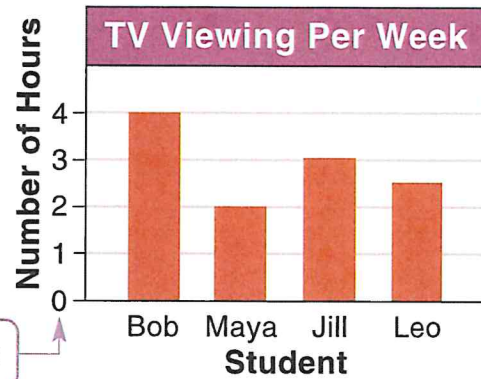
Find the quotient.

- |                                 |                                |                                 |                                 |                                |                                |
|---------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|
| 1. $2 \overline{)0}$            | 2. $4 \overline{)24}$          | 3. $5 \overline{)40}$           | 4. $3 \overline{)15}$           | 5. $2 \overline{)18\text{¢}}$  | 6. $5 \overline{)5\text{¢}}$   |
| 7. $4 \overline{)16}$           | 8. $3 \overline{)21}$          | 9. $2 \overline{)16}$           | 10. $4 \overline{)36}$          | 11. $5 \overline{)25\text{¢}}$ | 12. $2 \overline{)12\text{¢}}$ |
| 13. $6 \overline{)6}$           | 14. $7 \overline{)28}$         | 15. $6 \overline{)54}$          | 16. $8 \overline{)48}$          | 17. $9 \overline{)63\text{¢}}$ | 18. $9 \overline{)72\text{¢}}$ |
| 19. $45 \div 9$                 | 20. $32 \div 8$                | 21. $42 \div 6$                 | 22. $64 \div 8$                 | 23. $20 \div 5$                |                                |
| 24. $3\text{¢} \div 3$          | 25. $14\text{¢} \div 2$        | 26. $28\text{¢} \div 4$         | 27. $30\text{¢} \div 5$         |                                |                                |
| 28. $56\text{¢} \div 7\text{¢}$ | 29. $9\text{¢} \div 9\text{¢}$ | 30. $18\text{¢} \div 6\text{¢}$ | 31. $27\text{¢} \div 9\text{¢}$ |                                |                                |

# Graphing Sense

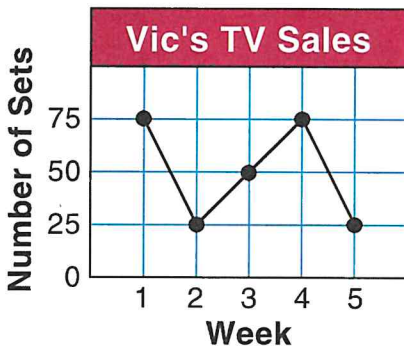


A **pictograph** uses pictures or symbols to represent data. The **Key** tells how many each symbol stands for.



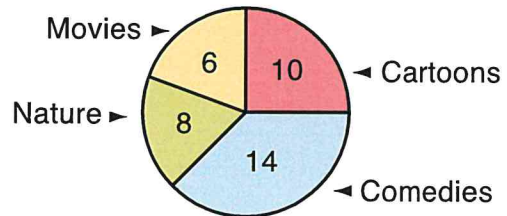
scale

A **bar graph** uses bars to represent data. The **scale** tells how much or how many each bar stands for.



A **line graph** uses points and lines on a grid to show change over a period of time. A line graph also has a scale.

TV Favorites of Ms. Lee's Class



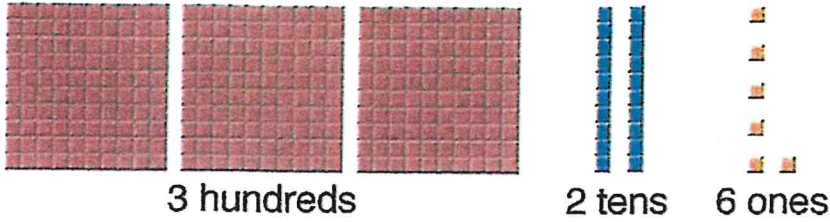
A **circle graph** uses sections of a circle to compare the parts of a whole.

**Choose the graph you would use in each case. Explain why.**

1. Compare at a glance the number of books each of your friends reads in a month.
2. Show how the temperature changed during the course of a week.
3. See how the number of classmates who like the beach compares to the total number of classmates.



# Hundreds



Standard Form: 326

Word Name: three hundred twenty-six

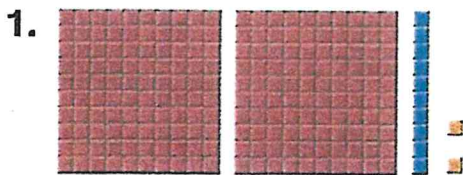
HUNDREDS	TENS	ONES
3	2	6

The digit 6 is in the *ones place*. It has a value of 6 ones, or 6.

The digit 2 is in the *tens place*. It has a value of 2 tens, or 20.

The digit 3 is in the *hundreds place*. It has a value of 3 hundreds, or 300.

Write the number in standard form.



2. 

HUNDREDS	TENS	ONES
6	0	7

3. 1 hundred 8 tens 3 ones

4. five hundred sixty-two

Write the place of the red <sup>underlined</sup> digit. Then write its value.

5. 482

6. 369

7. 141

8. 965

9. 174

10. 218

11. 522

12. 697

13. 742

14. 831

15. 420

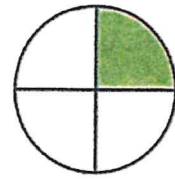
16. 505

# Identify Fractions

A fraction can name one or more *equal parts* of a whole or of a set.

▶  $\frac{1}{4}$  of the circle is shaded.

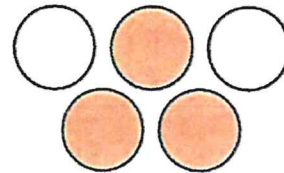
$\frac{3}{4}$  of the circle is *not* shaded.



4 equal parts

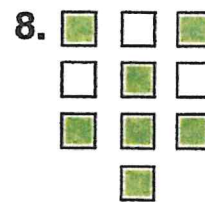
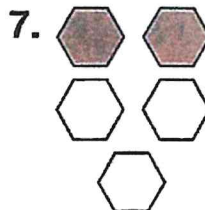
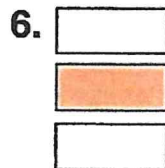
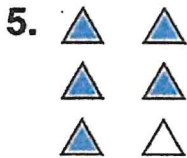
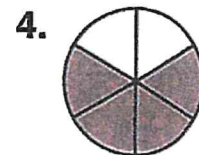
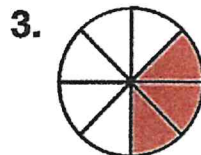
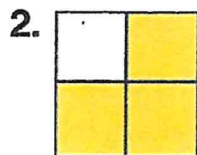
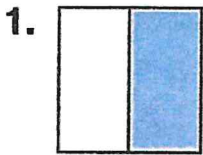
▶  $\frac{3}{5}$  of the set of circles is shaded.

$\frac{2}{5}$  of the set of circles is *not* shaded.

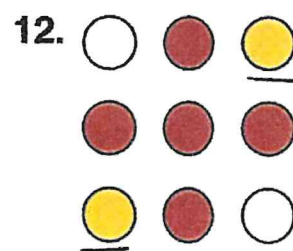
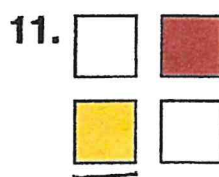
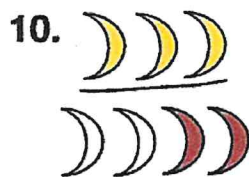
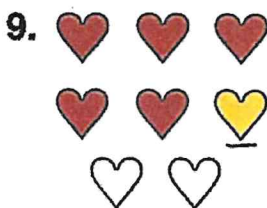


5 equal parts

Write the fraction for the shaded part of each whole or set. Then write the fraction for the part that is not shaded.



Write a fraction for the red part of each set. Then write a fraction for the yellow part.



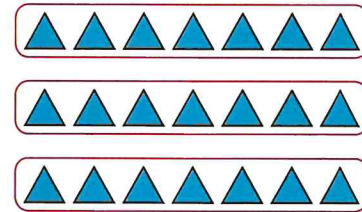
# Meaning of Multiplication

▶ To find how many, you can add  
3 groups of 7:  $7 + 7 + 7 = 21$

Since you are joining equal groups,  
you can **multiply**:

number of groups	×	number in each group	=	total number
3	×	7	=	21
		or		

7	←	factor
× 3	←	factor
21	←	product



3 groups of 7  
3 sevens  
 $3 \times 7$

Remember:  $3 \times 7 = 21$  is

▶ Add:  $2\text{¢} + 2\text{¢} + 2\text{¢} + 2\text{¢} = 8\text{¢}$

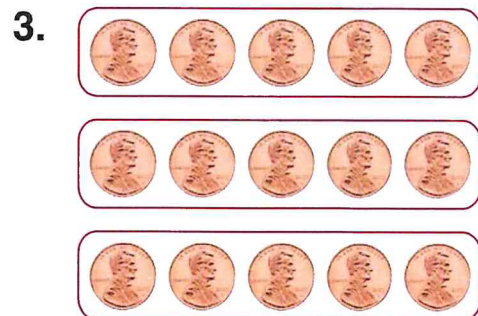
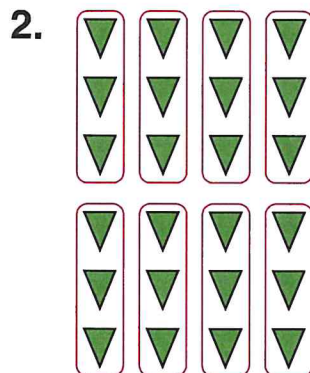
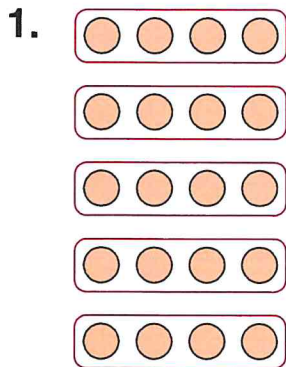
Or multiply:  $4 \times 2\text{¢} = \underline{\quad}$

$2\text{¢}$		$4 \times 2\text{¢} = 8\text{¢}$
× 4	or	↑     ↑     ↑
8¢		factors     product



4 groups of 2¢  
4 twos  
 $4 \times 2\text{¢}$

Write an addition sentence and  
a multiplication sentence for each.



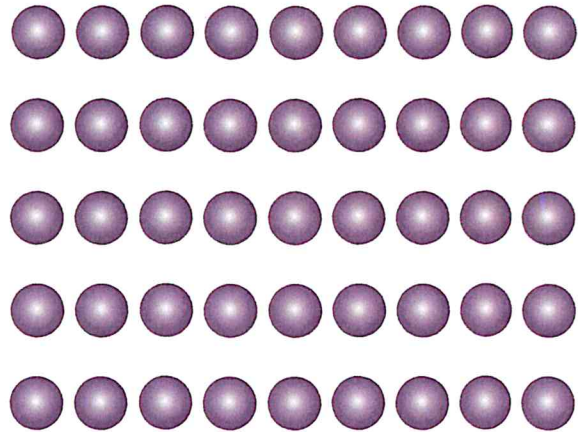
# Multiplication Facts

Add:

$$9 + 9 + 9 + 9 + 9 = 45$$

Or multiply:

$$\begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array} \quad \text{or} \quad 5 \times 9 = 45$$



5 groups of 9  
5 nines  
 $5 \times 9$

Find the product.

1.  $\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$

2.  $\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$

3.  $\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$

4.  $\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$

5.  $\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$

6.  $\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$

7.  $\begin{array}{r} 2\text{¢} \\ \times 5 \\ \hline \end{array}$

8.  $\begin{array}{r} 8\text{¢} \\ \times 3 \\ \hline \end{array}$

9.  $\begin{array}{r} 9\text{¢} \\ \times 2 \\ \hline \end{array}$

10.  $\begin{array}{r} 5\text{¢} \\ \times 4 \\ \hline \end{array}$

11.  $\begin{array}{r} 7\text{¢} \\ \times 3 \\ \hline \end{array}$

12.  $\begin{array}{r} 8\text{¢} \\ \times 5 \\ \hline \end{array}$

13.  $\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$

14.  $\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$

15.  $\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$

16.  $\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$

17.  $\begin{array}{r} 7\text{¢} \\ \times 6 \\ \hline \end{array}$

18.  $\begin{array}{r} 4\text{¢} \\ \times 9 \\ \hline \end{array}$

19.  $4 \times 6$

20.  $3 \times 4$

21.  $5 \times 6\text{¢}$

22.  $4 \times 4\text{¢}$

23.  $9 \times 5$

24.  $7 \times 9$

25.  $7 \times 4\text{¢}$

26.  $9 \times 3\text{¢}$

**Problem Solving** Write a multiplication sentence for each.

27. One factor is 4. The product is 24. What is the other factor?

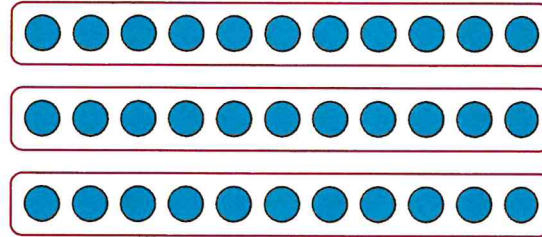
28. There are 9 mugs. On each mug, students paint 7 flowers and 5 trees. How many flowers are painted in all?

29. The factors are 3 and 7. What is the product?

# Multiply with 10, 11, and 12

Multiply:  $3 \times 11 = \underline{\quad ? \quad}$

$$\begin{array}{r} 11 \\ \times 3 \\ \hline 33 \end{array} \quad \text{or} \quad 3 \times 11 = 33$$



3 groups of 11  
3 evens  
 $3 \times 11$

**Multiply.**

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. $\begin{array}{r} 11 \\ \times 6 \\ \hline \end{array}$  | 2. $\begin{array}{r} 10 \\ \times 5 \\ \hline \end{array}$  | 3. $\begin{array}{r} 12 \\ \times 7 \\ \hline \end{array}$  | 4. $\begin{array}{r} 12 \\ \times 4 \\ \hline \end{array}$  | 5. $\begin{array}{r} 10\text{¢} \\ \times 9 \\ \hline \end{array}$  | 6. $\begin{array}{r} 12\text{¢} \\ \times 5 \\ \hline \end{array}$  |
| 7. $\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$  | 8. $\begin{array}{r} 12 \\ \times 3 \\ \hline \end{array}$  | 9. $\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$  | 10. $\begin{array}{r} 10 \\ \times 6 \\ \hline \end{array}$ | 11. $\begin{array}{r} 11\text{¢} \\ \times 8 \\ \hline \end{array}$ | 12. $\begin{array}{r} 10\text{¢} \\ \times 7 \\ \hline \end{array}$ |
| 13. $\begin{array}{r} 11 \\ \times 4 \\ \hline \end{array}$ | 14. $\begin{array}{r} 12 \\ \times 2 \\ \hline \end{array}$ | 15. $\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$ | 16. $\begin{array}{r} 11 \\ \times 9 \\ \hline \end{array}$ | 17. $\begin{array}{r} 12\text{¢} \\ \times 6 \\ \hline \end{array}$ | 18. $\begin{array}{r} 10\text{¢} \\ \times 8 \\ \hline \end{array}$ |

**Find the product.**

- |                   |                   |                           |                           |
|-------------------|-------------------|---------------------------|---------------------------|
| 19. $7 \times 12$ | 20. $1 \times 12$ | 21. $1 \times 11\text{¢}$ | 22. $2 \times 10\text{¢}$ |
| 23. $9 \times 12$ | 24. $3 \times 10$ | 25. $7 \times 11\text{¢}$ | 26. $3 \times 11\text{¢}$ |
| 27. $1 \times 10$ | 28. $4 \times 10$ | 29. $8 \times 12\text{¢}$ | 30. $5 \times 11\text{¢}$ |

## Problem Solving

31. Ms. Black made 11 paper triangles for each of 7 mobiles. How many paper triangles did Ms. Black make in all?
32. Dawn made 4 vests. On each vest she sewed 10 buttons and 12 stars. How many buttons did she sew?

# Recognize and Count Money



ten-dollar bill  
\$10.00



five-dollar bill  
\$5.00



one-dollar bill  
\$1.00



half-dollar  
50¢ or \$.50



quarter  
25¢ or \$.25



dime  
10¢ or \$.10



nickel  
5¢ or \$.05



penny  
1¢ or \$.01

To count bills and coins, arrange in order from greatest to least value. Then count on.



\$10.00

+



\$5.00

+



\$.25

+



\$.10

+



\$.01

\$10.00 → \$15.00 → \$15.25 → \$15.35 → \$15.36

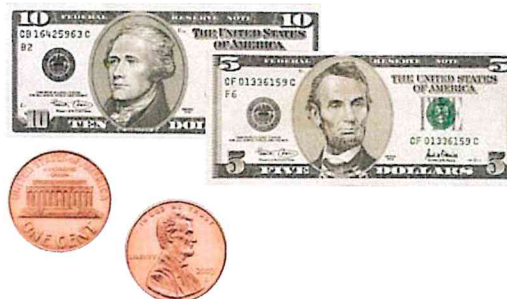
Write each amount. Use the dollar sign and decimal point.

1.



3. 1 five-dollar bill, 3 quarters,  
1 dime, 3 nickels, 2 pennies

2.



4. 4 dollars, 1 quarter, 2 nickels

# Record and Organize Data

▶ The tally chart at the right shows how many birds of different kinds came to a bird feeder one day.

Remember:  
I = 1 and IIII = 5

Kind of Bird	Tally
House Sparrow	IIII IIII IIII IIII IIII II
House Finch	IIII IIII IIII IIII III
Blue Jay	IIII IIII III
Chickadee	IIII IIII IIII I
Nuthatch	IIII
Junco	IIII IIII IIII IIII III

Which kind of bird visited the feeder most often? least often?

▶ Organizing information in a table from least to greatest or greatest to least makes it easier to find and compare data.

House sparrows visited the feeder most often. Nuthatches visited least often.

Birds at My Feeder	Kind	Number
	House Sparrow	32
	House Finch	25
	Junco	23
	Chickadee	16
	Blue Jay	13
	Nuthatch	4

The table and tally chart below show the number of farm animals Alex and Rachel saw on a trip.

Complete the table and tally chart.

	Animal	Number
1.	Cows	?
2.	Pigs	11
3.	Goats	?
4.	Horses	?
5.	Sheep	26
6.	Chickens	?

	Animal	Tally
	Cows	IIII IIII IIII IIII IIII II
	Pigs	
	Goats	IIII IIII IIII III
	Horses	IIII IIII IIII IIII I
	Sheep	
	Chickens	IIII IIII IIII IIII IIII III

**Problem Solving** Use the table and the tally chart from exercises 1–6.

- Make another table with the data organized from least to greatest.
- What kind of animal was seen most often? least often?

# Relate Multiplication and Division

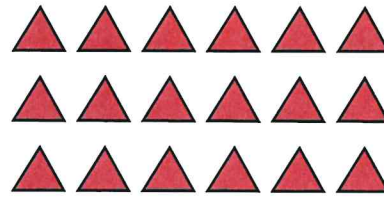
▶ **Multiply** when you join equal groups to find the total number.

$$3 \times 6 = 18$$

number of groups

number in each group

total number



18 in all  
6 in each group  
3 equal groups

▶ **Divide** when you want to find:

- the number of equal groups.

$$18 \div 6 = 3$$

total number

number in each group

number of groups

- the number in each equal group.

$$18 \div 3 = 6$$

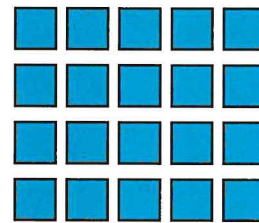
total number

number of groups

number in each group

▶ A **fact family** uses the same numbers. Use the facts to help you find related facts.

$$\begin{array}{ll} 4 \times 5 = 20 & 20 \div 5 = 4 \\ 5 \times 4 = 20 & 20 \div 4 = 5 \end{array}$$



These four facts make up a fact family for the numbers 4, 5, and 20.

Copy and complete each fact family.

$$\begin{array}{l} 1. \quad 6 \times 5 = 30 \\ \quad \quad ? \times 6 = 30 \\ 30 \div 5 = ? \\ 30 \div 6 = ? \end{array}$$

$$\begin{array}{l} 2. \quad 9 \times 7 = 63 \\ \quad \quad ? \times 9 = 63 \\ 63 \div 7 = ? \\ 63 \div 9 = ? \end{array}$$

$$\begin{array}{l} 3. \quad 4 \times 4 = 16 \\ 16 \div 4 = ? \end{array}$$

Write a fact family for each set of numbers.

- |              |              |              |              |
|--------------|--------------|--------------|--------------|
| 4. 2, 4, 8   | 5. 3, 7, 21  | 6. 4, 3, 12  | 7. 5, 7, 35  |
| 8. 7, 6, 42  | 9. 9, 1, 9   | 10. 8, 3, 24 | 11. 3, 2, 6  |
| 12. 8, 7, 56 | 13. 9, 5, 45 | 14. 5, 8, 40 | 15. 6, 6, 36 |

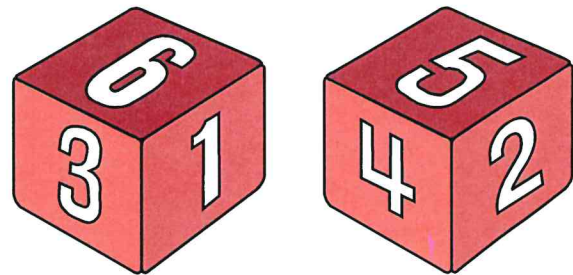


# Related Facts

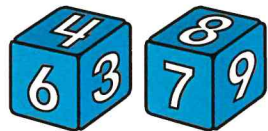
These four facts are **related facts**. They all use the same numbers.

$$6 + 5 = 11 \quad 11 - 5 = 6$$

$$5 + 6 = 11 \quad 11 - 6 = 5$$



Study these examples.



$$12 = 4 + 8$$

$$12 = 8 + 4$$

$$8 = 12 - 4$$

$$4 = 12 - 8$$

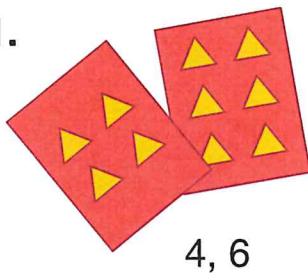


$$3 + 3 = 6$$

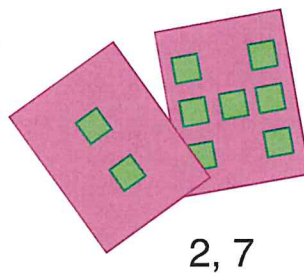
$$6 - 3 = 3$$

Write the related facts for each pair.

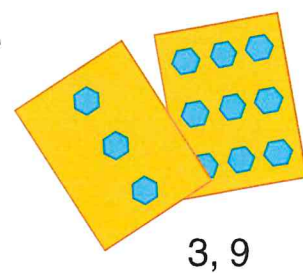
1.



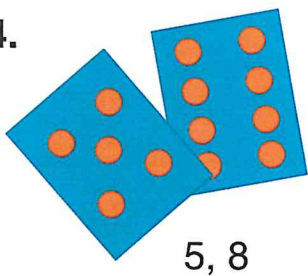
2.



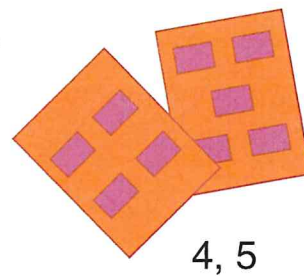
3.



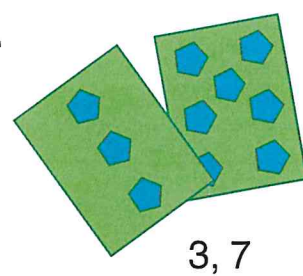
4.



5.



6.



7. 9, 5

8. 2, 5

9. 8, 8

10. 6, 7

Complete each addition or subtraction fact.

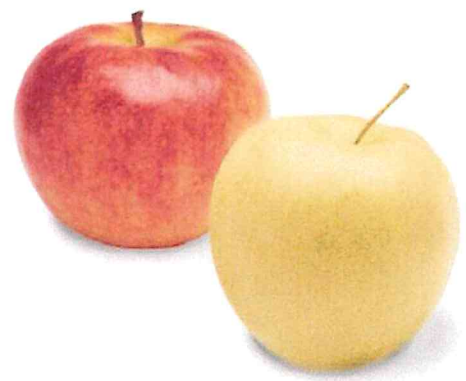
11.  $\underline{\quad} + 7 = 13$   
 $7 + \underline{\quad} = 13$   
 $13 - 7 = \underline{\quad}$   
 $13 - \underline{\quad} = 7$

12.  $\underline{\quad} + 9 = 17$   
 $9 + \underline{\quad} = 17$   
 $17 - \underline{\quad} = 9$   
 $17 - 9 = \underline{\quad}$

13.  $15 = \underline{\quad} + 8$   
 $15 = 8 + \underline{\quad}$   
 $8 = 15 - \underline{\quad}$   
 $\underline{\quad} = 15 - 8$

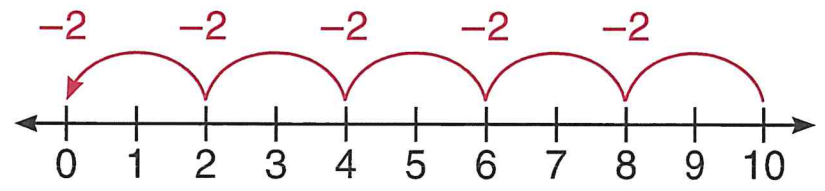
# Understand Division

Pablo packs 10 apples into baskets. He puts 2 apples in each basket. How many baskets does he pack?



- ▶ To find how many baskets, separate 10 into equal groups of 2. Use repeated subtraction.

**Think**  
 How many groups of 2 are in 10?  
 Count back by 2s until you reach 0.  
 8, 6, 4, 2, 0



You subtracted 5 times.

Pablo packs 5 baskets.

- ▶ You can also write a **division sentence** to show how to separate 10 into equal groups of 2.

Write:  $10 \div 2 = 5$  ← **division sentence**

↑  
number  
in all

↑  
number in  
each group

↑  
number of  
groups

**Read as:** “Ten divided by two equals five.”

## Find how many groups.

- |                                 |                                 |                                 |
|---------------------------------|---------------------------------|---------------------------------|
| 1. 16 in all<br>8 in each group | 2. 9 in all<br>3 in each group  | 3. 20 in all<br>5 in each group |
| 4. 14 in all<br>2 in each group | 5. 18 in all<br>9 in each group | 6. 15 in all<br>5 in each group |
| 7. 36 in all<br>4 in each group | 8. 12 in all<br>3 in each group | 9. 10 in all<br>2 in each group |