

$$n = \underline{\hspace{2cm}}$$

$$n = \underline{\hspace{2cm}}$$

5. $7 + n = 12$

6. $n + 5 = 13$

Find the missing addend.

$$\begin{array}{r} \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \end{array}$$

4. Write two number sentences to show the commutative property of 3 and 8:

1. $5 + 4 = \underline{\hspace{2cm}}$ 2. $3 + 0 = \underline{\hspace{2cm}}$ 3. $1 + 3 + 7 = \underline{\hspace{2cm}}$

Practice:

$$\begin{array}{r} 8 \\ + n \\ \hline 5 \end{array} \qquad \begin{array}{r} n = 3 \\ - 5 \\ \hline 8 \end{array} \qquad \begin{array}{r} 6 \\ + \frac{4}{4} \\ \hline n \end{array} \qquad \begin{array}{r} n = 2 \\ - \frac{4}{4} \\ \hline 6 \end{array}$$

- To find a missing addend, we subtract the known addend from the sum.

$$\begin{array}{r} \text{Total} \\ + \text{Some more} \\ \hline \text{Some} \\ 6 \text{ volleyballs} \\ + 7 \text{ volleyballs} \\ \hline 13 \text{ volleyballs} \end{array}$$

Formula Problem

- “Some and some more” problems have an addition formula.

- The expression $2 + 6 = 8$ is a **number sentence**.

$$7 + 0 = 7 \quad 0 + 2 = 2$$

number does not change.

- The **Identity Property of Addition** tells us that when we add zero to a number, that

$$6 + 3 = 9 \quad 3 + 6 = 9$$

addends does not change the sum.

- The **Commutative Property of Addition** tells us that changing the order of the

$$\begin{array}{r} 5 \\ + 2 \\ \hline \text{addend} \\ + \text{addend} \\ \hline \text{sum} \end{array}$$

Example:

$$\text{addend} + \text{addend} = \text{sum}$$

- Added numbers are called **addends** and the answer is the **sum**.

Review of Addition

Name _____

$$7. 8 + 4 + 2 + 6 + 3 + 1 + 7 + 9 + 5 = \underline{\hspace{2cm}}$$

$$6. 5 + 4 + 7 + 3 + 9 + 2 + 1 + 1 = \underline{\hspace{2cm}}$$

$$5. 9 + 2 + 6 + 4 + 5 + 1 + 8 = \underline{\hspace{2cm}}$$

Find sets of 10. Add.

$$y = \underline{\hspace{2cm}}$$

$$25 - 19 = \underline{\hspace{2cm}}$$

$$7 + 4 + 8 = 19$$

$$3. 7 + y + 4 + 8 = 25$$

$$n = \underline{\hspace{2cm}}$$

$$16 - 12 = \underline{\hspace{2cm}}$$

$$9 + 3 = 12$$

$$1. 9 + 3 + n = 16$$

Find each missing addend.

Practice:

$$2. x + 5 + 4 = 16$$

$$5 + 4 = 9$$

$$16 - 9 = \underline{\hspace{2cm}}$$

$$n = \underline{\hspace{2cm}}$$

$$4. 6 + 5 + n + 9 + 2 + 7 = 34$$

$$6 + 5 + 9 + 2 + 7 = \underline{\hspace{2cm}}$$

$$34 - 29 = \underline{\hspace{2cm}}$$

$$n = \underline{\hspace{2cm}}$$

- Look for pairs of addends that can be added together to equal 10. These are "sets of 10."

Sets of 10

$$\begin{array}{l} 9 + 1 = 10 \\ 8 + 2 = 10 \\ 7 + 3 = 10 \\ 6 + 4 = 10 \\ 5 + 5 = 10 \end{array}$$

sum of given addends
subtract from total
missing addend

$$\begin{array}{l} 7 + 6 = 13 \\ 18 - 13 = 5 \\ n = 5 \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

Example:

given total.

- To find a missing **addend**, we subtract the sum of the given addends from the

Missing Addends

Name _____

Sequences

Digits

Sequences

- Counting numbers have no end.
- 1, 2, 3, 4, 5, ...

- A **sequence** is a counting pattern. It can go "up" or "down."

5, 10, 15, 20, 25, ...

20, 15, 10, 5, ...

- Subtract to find the **rule**.

Example:

9, 13, 17, _____, _____, _____, ...

We can also look at the 4s row in the times

$$\begin{array}{r} 13 \\ - 9 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 17 \\ - 13 \\ \hline 4 \end{array}$$

table to find other numbers in the sequence.

The rule for this sequence is count up by fours.

$$\begin{array}{ccccccc} & +4 & +4 & +4 & +4 & +4 & \\ 9, & 13, & 17, & 21, & 25, & 29 \end{array}$$

Digits

- Digits are the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

471 has three digits.

The last digit is 1.

Practice:

Write the rule and the next two numbers of each counting sequence.

1. 9, 8, 7, _____, _____, ...

Rule: Count down by _____.

Rule: Count up by _____.

Find the missing number in each counting sequence.

3. 35, 30, 25, _____, 15 ...

4. 2, _____, 12, 17, 22, 27 ...

How many digits are in each number?

5. 108 _____

6. 5372 _____

What is the last digit of each number?

7. 214 _____

8. 75,391 _____

Name _____

4. 6 hundreds, 8 tens, and 3 ones equals _____.
- a. 41 _____ b. 534 _____ c. 483 _____
3. The digit 4 is in what place in each of these numbers?
- Which is less: \$132 or \$324? Remember to write the dollar sign. _____

Hundreds	Tens	Ones

2. Show \$324.

Hundreds	Tens	Ones

1. Show \$132.

Practice:



- We can use money manipulatives to understand place value.

243 means		
2	4	3
hundreds	tens	ones
100	10	1
100	10	1
100	10	1

Example:

- Separate a three-digit number, such as money amount, into hundreds, tens, and ones.

Place Value

Ordinal Numbers
Months of the Year

- Ordinal numbers tell position or order. One common use is to name days of the month and months of the year.
- Most ordinal numbers end in "th." The ordinals circled below are exceptions.

first 1 st	sixth 6 th	eleventh 11 th
second 2 nd	seventh 7 th	twelfth 12 th
third 3 rd	eighth 8 th	thirteenth 13 th
fourth 4 th	ninth 9 th	twentieth 20 th
fifth 5 th	tenth 10 th	twenty-first 21 st

- There are 12 months in a year.

- The month/day/year form of June 12, 1998, is 6/12/98.
- We can use ordinal numbers to name the months in order. January is the first month. December is the twelfth month.

Practice:

- Identify which circle the arrow is pointing to.

a.

b.

The _____ circle.

The _____ circle.

- On what date where you born?

- This year, Martin Luther King Day is

_____/_____/_____
Month Day Year

_____/_____/_____
Month Day Year

- How many months are in a year? _____

- What is the name of the fifth month? _____

- What is the name of the eighth month? _____

- Which month gets the extra day? _____

- Write the twenty-first day of September, 2007 in month/day/year form.

_____/_____/_____
_____/_____/_____

- List three ordinal numbers that do not end in "th", such as "2nd".

Name _____

Lesson 6

6

Retaching

• Review of Subtraction

- The answer to a subtraction problem is called the **difference**.

$$\begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array}$$
 difference

- Check subtraction by adding.

Subtract Down Seven minus five equals two.	$\begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array}$	Add Up Two plus five equals seven.
	$\uparrow$	$\downarrow$

- The **order** of numbers in subtraction is important.

$7 - 5$ is different from $5 - 7$.

- When you learn one **fact family**, you know four facts.

$\begin{array}{r} 2 \\ 5 \\ 7 \end{array}$	$\begin{array}{r} 7 \\ 2 \\ 5 \end{array}$	$\begin{array}{r} 5 \\ 7 \\ 2 \end{array}$	$\begin{array}{r} 2 \\ 5 \\ 7 \end{array}$	$\begin{array}{r} 3 \\ 6 \\ 9 \end{array}$	$\begin{array}{r} 6 \\ 3 \\ 9 \end{array}$	$\begin{array}{r} 9 \\ 3 \\ 6 \end{array}$	$\begin{array}{r} 6 \\ 9 \\ 3 \end{array}$
--	--	--	--	--	--	--	--

Practice:

Subtract. Check your answers by adding.

1. $\begin{array}{r} 17 \\ - 8 \\ \hline \end{array}$ Check: $\begin{array}{r} 8 \\ + \\ \hline \end{array}$	2. $\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$ Check: $\begin{array}{r} 7 \\ + \\ \hline \end{array}$	3. $\begin{array}{r} 14 \\ - 6 \\ \hline \end{array}$ Check: $\begin{array}{r} 6 \\ + \\ \hline \end{array}$	4. $\begin{array}{r} 18 \\ - 9 \\ \hline \end{array}$ Check: $\begin{array}{r} 9 \\ + \\ \hline \end{array}$	5. $\begin{array}{r} 11 \\ - 4 \\ \hline \end{array}$ Check: $\begin{array}{r} 4 \\ + \\ \hline \end{array}$	6. $\begin{array}{r} 15 \\ - 8 \\ \hline \end{array}$ Check: $\begin{array}{r} 8 \\ + \\ \hline \end{array}$
--	--	--	--	--	--

- 7. Describe how to check a subtraction answer. Show an example.

You can check subtraction by _____.

Example:

• Writing Numbers Through 999

- Whole numbers are the counting numbers and the number zero.

0, 1, 2, 3, 4, 5, ...

0	zero	10	ten	20	twenty
1	one	11	eleven	30	thirty
2	two	12	twelve	40	forty
3	three	13	thirteen	50	fifty
4	four	14	fourteen	60	sixty
5	five	15	fifteen	70	seventy
6	six	16	sixteen	80	eighty
7	seven	17	seventeen	90	ninety
8	eight	18	eighteen	100	one hundred
9	nine	19	nineteen		

- Use hyphens when writing the numbers 21–99 (except numbers that end with 0).

426 four hundred twenty-six
809 eight hundred nine

- Don't write "and" unless you mean a decimal point.

\$2.78 two dollars and seventy-eight cents

Practice:

Use words to write each number.

1. 3 _____

2. 75 _____

3. 88 _____

4. 367 _____

5. 629 _____

Use digits to write each number.

6. fifteen _____

7. thirty-seven _____

8. one hundred seven _____

9. three hundred sixty-two _____

$$\begin{array}{r} 5. \quad \$27 \\ + \$67 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad \$63 \\ + \$22 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad \$51 \\ + \$43 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad \$95 \\ + \$2 \\ \hline \end{array}$$

$$\begin{array}{r} 1. \quad \$48 \\ + \$9 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \$31 \\ + \$12 \\ \hline \end{array}$$

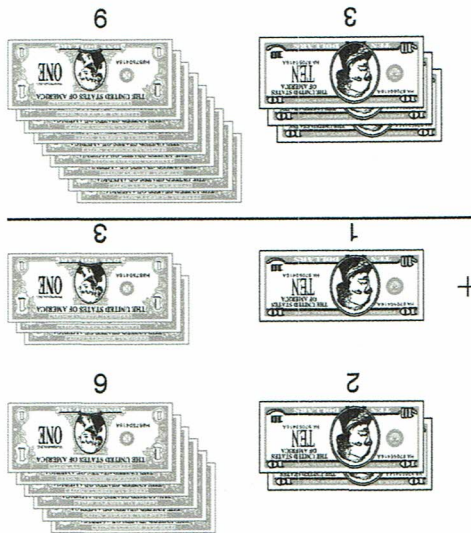
$$\begin{array}{r} 3. \quad \$72 \\ + \$24 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \$53 \\ + \$36 \\ \hline \end{array}$$

Add. Remember to write the dollar sign.

Practice:

The total is 3 tens and 9 ones, which is \$39.



Example: Sumika had \$26. Then on her birthday she was given \$13. How much money does Sumika have now?
Solution: We can use \$10 bills and \$1 bills to add \$13 to \$26.

1. Add the ones.
2. Add the tens.
3. Write the dollar sign.

- To add money amounts:
- Money amounts are sometimes written as two-digit numbers when there are no coins. For example, twenty-five dollars might be written \$25.

• Adding Money

• Adding with Regrouping

- When added numbers in the ones column add up to more than 10 we can regroup the ones to make tens. Then we carry the new tens into the tens column.
- Regroup 10 ones to make 1 ten.

$\begin{array}{r} 48 \\ + 15 \\ \hline 63 \end{array}$ 1. Add ones. 8 + 5 = 13 2. Write the 3 and carry the 1 ten to the tens column. 3. Add tens. 1 + 4 + 1 = 6 4. Write the 6.	$\begin{array}{r} 57 \\ + 29 \\ \hline 86 \end{array}$ 1. Add ones. 7 + 9 = 16 2. Write the 6 and carry the 1 ten to the tens column. 3. Add tens. 1 + 5 + 2 = 8 4. Write the 8.
--	--

Practice:

Solve each problem using money manipulatives. Then add by regrouping to solve. Remember to write the dollar sign.

1. $\begin{array}{r} \\$72 \\ + \\$19 \\ \hline \end{array}$ 2. $\begin{array}{r} \\$38 \\ + \\$24 \\ \hline \end{array}$ 3. $\begin{array}{r} \\$67 \\ + \\$35 \\ \hline \end{array}$	4. $\begin{array}{r} \\$42 \\ + \\$39 \\ \hline \end{array}$ 5. $\begin{array}{r} \\$65 \\ + \\$25 \\ \hline \end{array}$ 6. $\begin{array}{r} \\$51 \\ + \\$49 \\ \hline \end{array}$	7. $\begin{array}{r} \\$72 \\ + \\$16 \\ \hline \end{array}$ 8. $\begin{array}{r} \\$75 \\ + \\$66 \\ \hline \end{array}$ 9. $\begin{array}{r} \\$24 \\ + \\$57 \\ \hline \end{array}$
--	--	--

Use pencil and paper to add.

Even and Odd Numbers

- Even numbers: 0, 2, 4, 6, 8, ...
- Odd numbers: 1, 3, 5, 7, 9, ...
- Look at the last digit:

383	odd
654	even
295	odd

Practice:

Write "even" or "odd" for each number.

- 72 _____
- 781 _____
- 490 _____
- 15 _____
- 213 _____
- 1082 _____

7. List the five three-digit even numbers that have an 8 in the hundreds place and a 5 in the tens place.

a. $\frac{8}{5}$ _____

b. _____

c. _____

d. _____

e. _____

8. List the five three-digit odd numbers that have a 4 in the hundreds place and a 9 in the tens place.

a. $\frac{4}{9}$ _____

b. _____

c. _____

d. _____

e. _____

9. Write a three-digit even number. Write the number in words.

Words _____

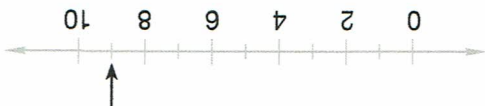
10. Write a three-digit odd number.

Words _____

Number Lines

- To draw a number line, begin by drawing a line. Next, put tick marks on the line, keeping an equal distance between the marks. Then label the tick marks with numbers. Sometimes every mark can be labeled and on other number lines only some marks are labeled. The mark may be labeled by two, by four, by five, or by some other number. The labels are to indicate how far the mark is from zero.

Example: What number is the arrow pointing to?

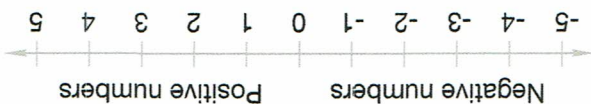


Begin at zero and count by ones, the distance from one tick mark to the next is 1. The arrow is pointing to the number 9.

- Sometimes zero is not shown on the number line, so we must begin counting with the number shown and find the pattern of the numbers.

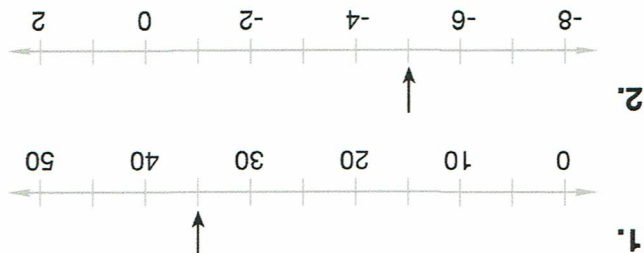
- Numbers that are greater than zero are called **positive** numbers and numbers that are less than zero are called **negative** numbers. To write a negative number, we write the negative sign (minus sign) to the left of the digit.

- Zero is neither positive nor negative.



Practice:

To what number is each arrow point in problems 1–2?



Compare:

3. $4 \bigcirc -5$

4. $-8 \bigcirc -4$

5. $0 \bigcirc -7$

6. Create a number line in problem 2 to arrange these numbers in order from least to greatest:
7, -5, 3, -9, 0, -1