

Standards-Based Mathematics

Help Pages

Vocabulary

Math Terms

addition - combining numbers. The sign "+" means add. The answer to an addition problem is called the *sum*.

Example: When 5 and 2 are combined, the sum is 7; 5 + 2 = 7.

subtraction - taking one number away from another. The sign "-" means subtract. The answer to a subtraction problem is called the *difference*.

Example: When 1 is taken away from 5, the difference is 4; 5 - 1 = 4.

Geometry: Equal Shares

Half of this circle is shaded. 1 of 2 equal shares is shaded.



A **fourth**, or a **quarter**, of this circle is shaded.

1 of 4 equal shares is shaded.



Geometry

Two-Dimension	nal Shapes (flat)	Three-Dimensional Shapes (solid)			
3 sides	4 sides	٨			
triangle	rectangle	cone	sphere		
4 sides	4 sides				
square	trapezoid	cube	rectangluar prism		
6 sides					
hexagon		cylinder			

Measurement: Time Relationships

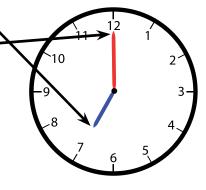
30 minutes = 1 half hour 7 days = 1 week 60 minutes = 1 hour

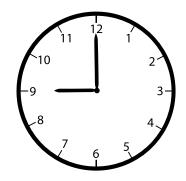
Time

A clock has two hands. The long hand is the **minute hand**. The short hand is the **hour hand**.

On this clock, the hour hand is pointing to the 7. The minute hand is pointing to the 12.

The time is 7:00, or seven o'clock.



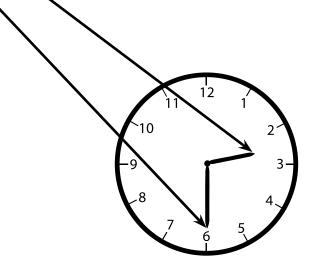


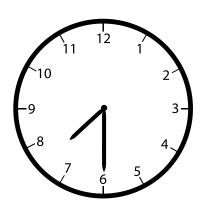
The time on this clock is nine o'clock, or 9:00.

On this clock the hour hand is past the 2, but not yet to the 3.

The minute hand is pointing to the 6.

The time is 2:30, or two thirty.





The time on this clock is seven thirty, or 7:30.

Money

There are 4 coins shown here.

A **penny** is worth 1¢.









A **nickel** is worth 5¢

A **dime** is worth 10¢.





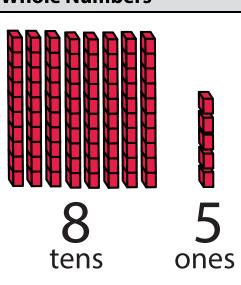




A **quarter** is worth 25¢.

Place Value

Whole Numbers



The number above is read: eighty-five.

A **fact family** is a set of related facts using addition, subtraction, and the same three numbers.

Example:

Write a fact family using 3, 4, and 7.

$$3 + 4 = 7$$
 $7 - 3 = 4$

$$7 - 3 = 4$$

$$4 + 3 = 7$$

$$4 + 3 = 7$$
 $7 - 4 = 3$

Solved Examples

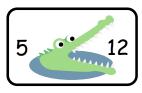
Greater Than and Less Than

Numbers can be compared by saying one is greater than another or one is **less than** another.

The symbol ">" means greater than. The symbol "<" means less than. Think of the wide part of the sign as an alligator's mouth eating the bigger number. (Hint: The open part of the sign is near the bigger number.)

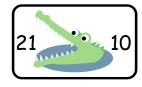
Examples:

5 is less than 12



5 < 12

21 is greater than 10



21 > 10

Solved Examples

Whole Numbers (continued)

It is very important to learn the **addition facts**. This table will help.

Choose a number in the top gray box and add it to a number in the left gray box. Follow both with a finger (one down and one across) until they meet. The number in that box is the sum of the two starting numbers.

An example is shown: 3 + 4 = 7

+	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

Place a finger on 32. Subtract 10. Ten less than 32 is 22.

Solved Examples

Whole Numbers (continued) This is a hundreds chart.

100 Chart 31 (32 77|

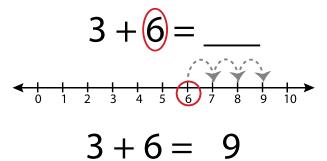
Place a finger on 51. Add 10. Ten more than 51 is 61.

Notice which direction to move your finger when you add or subtract.

Addition Strategies

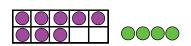
Counting On

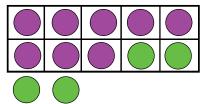
When adding two numbers, start with the bigger number and count on.



Make A Ten

Make a ten to help add. When adding two numbers, take apart one of the numbers to "make a ten" with the other number.



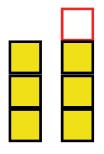


$$10 + 2 = 12$$

Doubles + 1

When adding two numbers that are close to a double, think of the double and add 1.

Think, what double is close to 3 + 4? 3 + 3 is close to 3 + 4.



Think of 3 + 4 as 3 + 3 + 1.

Subtraction Strategy

Counting Back

When subtracting two numbers, start with the bigger number and count back.

