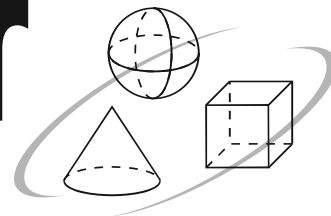


Summer Solutions.



Minutes a Day—Mastery for a Lifetime!

Level 1

Mathematics
3rd Edition

Help Pages


Help Pages

Vocabulary

Math Terms

addition — the values of two or more numbers joined together. The sign "+" means add. The answer to an addition problem is called the **sum**. Example: Put the values of 5 and 2 together; the sum is 7; $5 + 2 = 7$.

subtraction — a value taken away from another. The sign "-" means subtract. The answer to a subtraction problem is called the **difference**. Example: Take 1 away from 5, the difference is 4; $5 - 1 = 4$.

fraction — a part of a whole. Example:  This box has 4 parts. 1 part is shaded; $\frac{1}{4}$

Geometry — Solids




cone 

sphere 

cube 

rectangular prism 

Geometry — Polygons

Number of Sides	Name	Number of Sides	Name	Number of Sides	Name
3 	triangle	4 	square	4 	rectangle

Measurement — Relationships

Time

30 minutes = 1 half-hour

60 minutes = 1 hour

7 days = 1 week

Help Pages

Place Value

Whole Numbers

8	5
Tens	Ones

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.

$$\begin{array}{ll} 3 + 4 = 7 & 7 - 3 = 4 \\ 4 + 3 = 7 & 7 - 4 = 3 \end{array}$$

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*.
(Hint: The open part of the sign is near the bigger number.)

Examples: 10 < 18 10 is less than 18.
27 > 13 27 is greater than 13.

Help Pages

Solved Examples

Whole Numbers (continued)

It is very important to learn the **addition facts**. This table will help, but it must be memorized!

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.

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

When adding whole numbers, the numbers must first be lined-up from the right. Starting with the ones place, add the numbers.

Look at these examples of **addition**.

Examples: Find the sum of 26 and 12.

$$\begin{array}{r} 26 \\ + 12 \\ \hline 38 \end{array}$$

Add 34 and 25.

$$\begin{array}{r} 34 \\ + 25 \\ \hline 59 \end{array}$$

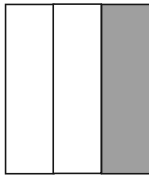
1. Line up the numbers on the right.
2. Beginning with the ones place, add.
3. Repeat with the tens place.

Help Pages

Solved Examples

Fractions

A **fraction** is used to represent part of a whole. The top number in a fraction is the part. The bottom number in a fraction is the whole.



The whole rectangle has 3 equal sections.
Only 1 section is shaded.

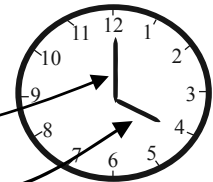
This can be shown as the fraction $\frac{1}{3}$.

$\frac{1}{3} \quad \begin{array}{l} \text{shaded part} \\ \hline \text{parts in the whole} \end{array}$

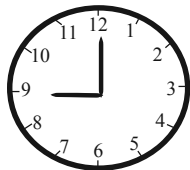
Time

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

On this clock the hour hand is pointing to the 4.
The minute hand is pointing to the 12.



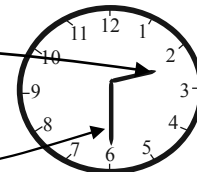
The time is four o'clock or 4:00.



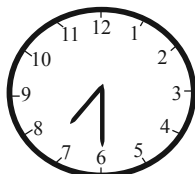
The time is nine o'clock or 9:00.

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 two thirty or 2:30.



The time is seven thirty or 7:30.

Help Pages

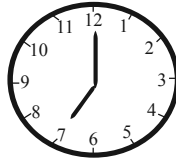
Solved Examples

Time (continued)

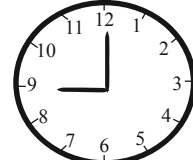
The measure of how long something takes to happen is called **elapsed time**.

Example:

The movie began at 7:00



and ended at 9:00



How long did the movie last? (How much time passed between 7:00 and 9:00?)

From 7:00 to 8:00 is 1 hour. From 8:00 to 9:00 is another hour. In all, that is 2 hours.

There are **2 hours** between 7:00 and 9:00, so the movie lasted for 2 hours.

Money

There are 4 coins shown here. Know their names and how much money each is worth.



A **penny** is worth 1¢.

A **nickel** is worth 5¢.



A **dime** is worth 10¢.

A **quarter** is worth 25¢.



Who Knows?

Sides in a triangle?.....(3)

Sides in a square?.....(4)

Sides in a rectangle?.....(4)

Days in a week?.....(7)

Minutes in an hour?.....(60)

Minutes in a half-hour?.....(30)

Numbers added together?.....(addends)

Answer to an addition problem?.....(sum)

Answer to a subtraction problem?.....(difference)