

Math Symbols Guide

Operation symbols

Operations

+

Addition

Put amounts together.

$$5 + 3 = 8$$

—

Subtraction

Find the difference or take away.

$$9 - 4 = 5$$

•

Multiplication Dot

Multiply two values.

$$6 \cdot 3 = 18$$

÷

Division

Split into equal groups.

$$12 \div 3 = 4$$

—

Fraction Bar

Divide the top by the bottom.

$$3/4 \text{ means } 3 \div 4$$

%

Percent

A part out of 100.

$$25\% = 25/100$$

Math Symbols Guide

Equality and comparison symbols

Equality and Comparison

=

Equal

Both sides have the same value.

$$4 + 2 = 6$$

≠

Not Equal

The values are different.

$$5 \neq 8$$

<

Less Than

The value on the left is smaller.

$$3 < 7$$

>

Greater Than

The value on the left is larger.

$$9 > 2$$

≤

Less Than or Equal To

Smaller than, or exactly equal to.

$$x \leq 6$$

≥

Greater Than or Equal To

Larger than, or exactly equal to.

$$x \geq 4$$

≈

Approximately Equal

Close, but not exact.

$$\pi \approx 3.14$$

Math Symbols Guide

Grouping and algebra symbols

Grouping and Algebra

()

Parentheses

Group a part that belongs together.

$$3(4 + 2)$$

[]

Brackets

Group expressions containing parentheses.

$$2[5 + (3 - 1)]$$

x

Variable

A letter that represents a number.

$$x + 4 = 10$$

4x

Implied Multiplication

A number beside a variable means multiply.

$$4x \text{ means } 4 \cdot x$$

|x|

Absolute Value

The distance a number is from zero.

$$|-5| = 5$$

Math Symbols Guide

Powers, roots, and symbols easy to confuse

Powers, Roots, and Special Symbols

 x^2

Squared

Multiply a value by itself.

$$5^2 = 5 \cdot 5 = 25$$

 x^3

Cubed

Use the value as a factor three times.

$$2^3 = 2 \cdot 2 \cdot 2$$

 $\sqrt{}$

Square Root

Find the number multiplied by itself.

$$\sqrt{49} = 7$$

 π

Pi

A number used with circles; about 3.14.

$$\pi \approx 3.14$$

 $\pm$

Plus or Minus

Two values: one positive and one negative.

$$x = \pm 4$$

Easy to Confuse

 -5
 $8 - 5$

Sign or operation?

The first sign describes a negative number. The second tells you to subtract.

 x
 $\times$

Variable or multiply?

Use a dot or parentheses for multiplication when an x-variable is nearby.

 3.5
 $3 \cdot 5$

Low or centered dot?

A decimal point sits low. A multiplication dot is centered.

 $=$
 $\approx$

Exact or close?

Equal means exact. Approximately equal means close after rounding.