Symbols from books 1 through 6.

- + This is a plus sign. It means plus, or add. Example: 2 + 3 means 2 plus 3.
- This is a minus sign. It means minus or subtract. Example: 7 - 2 means 7 minus 2.
- × This is a times sign. It means times, or multiplied by. Example: 3×4 means 3 times 4.
- This also means times. Example: 2 3 means 2 times 3.
- This also means times. It is often used in computer programming.
 Example: 3 * 4 means 3 times 4
- This means divided by.
 Example: 10 ÷ 5 means 10 divided by 5.
-) This means divided by or divided into.

Example: $4\overline{)12}$ means 12 divided by 4, or 4 into 12

Notice how when you say divided by, you read the problem backwards, 12 divided by 4.

- = This is an equal sign. It means "is equal to", or "equals". Example: 2 + 2 = 4 means 2 plus 2 <u>equals</u> 4 or 2 plus 2 <u>is equal to</u> 4.
- > This is a greater than sign. It means "is greater than". Example: 3 > 2 means 3 is greater than 2.
- This is a less than sign. It means "is less than".
 Example: 1 < 4 means 1 is less than 4.
 - this is a decimal point. Example: In 3.2 the 3 and the 2 are separated by a decimal point.

- this symbol in a fraction shows it is a fraction. It means divided by. Example: $\frac{2}{3}$ is 2 divided by 3, and is the fraction two-thirds.
- a symbol for "per" when talking about ratios.
 (He ate <u>2 fish</u>.) (The car went <u>60 miles</u>.)
 meal hour
- / this symbol means the same as the above fraction symbol. It is often used to make typing easier. Example: 2/3 is the fraction two-thirds or 2 divided by 3.
- / a symbol for "per" when talking about ratios.(He ate 2 fish/meal.) (The car went 60 miles/hour.)
- a symbol that can be read "out of" when talking about ratios.
 (4/100 means 4 out of 100 or 4%).
- / a symbol that can be read "to" when talking about ratios. ($\frac{2}{3}$ is read 2 to 3.)
- : this symbol in a ratio means "out of" "per" or "to". (3:5 means 3 out of 5, or 3 per 5, or 3 to 5.)
- the symbol for percent. It comes from the digits of the number 100.
 The slash is the 1, and the two circles are the two zeros.
 Percent means per hundred.
- .72 a <u>bar</u> over part of a decimal means those numbers repeat on and on. (.72 means .72727272...)
- \$ dollar sign

- ¢ cents
- () parentheses.
- 6^2 the two is an exponent and means squared.
- 5^3 the three is an exponent and means cubed
- any small number written to the upper right corner of a number is an exponent. (For 2⁴ you say 2 to the 4th power.)
- $\sqrt{}$ the symbol for square root ($\sqrt{12}$ is the square root of 12.)
- $\sqrt[3]{}$ the symbol for cube root ($\sqrt[3]{24}$)
- $\sqrt[4]{}$ the symbol for fourth root ($\sqrt[4]{57}$)
- [°] the symbol for degrees.

- # number
- : separates the two numbers when talking about odds, you say "to". (Odds of 3:5 is said, "odds of three to five")
- ∠ a symbol for "angle".
- - the symbol for "degrees".
- <u>90°</u> an angle shaped like the corner of a square.
- <u>180°</u> two rays going in opposite directions and forming a straight line.



-the two lines that make the small box, show the angle is right angle (90°)

[↓] tally marks

-the line that makes the curve, shows the angle is <u>not</u> a right angle (90°) . It also helps to show which angle(s) you are talking about.

 π - the symbol for pi (I used a π in my calculation.)

 \perp - the symbol for perpendicular lines. It means "is perpendicular to". (Line NM \perp Line OP means line NM is perpendicular to line OP.)

 $\|\,$ - the symbol for parallel lines. It means "is parallel to". (Line NM $\|\,$ Line OP means line NM is parallel to line OP.)

 $\underline{inches^2}$ - the small 2 is called the exponent and means "squared".

 $inches^3$ – the small 3 is called the exponent and means "cubed".

• in geometry this is a point.

 \overline{AB} the line above the AB means AB is a segment.

- AB the line above the AB means AB is a ray.
- AB the line above the AB means AB is a line.

Abbreviations

A – a capital A stands for area.

b - base

- C capital C stands for circumference
- cm centimeter
- d a small d means diameter
- ft feet
- h height
- in inches
- l length
- m m stands for "the measure of" when it is written in front of an angle symbol. (m / A means "the measure of angle A.)
- m meter (5 m means 5 meters)
- P capital P stands for perimeter
- r a small r means radius
- s side
- V a capital V stands for volume
- w width
- yd yard

Formulas

Area: Square	$\mathbf{A} = \mathbf{s}^2$
Rectangle	$A = 1 \times w$
Triangle	$A = \frac{1}{2} \times b \times h$
Circle	$\mathbf{A} = \boldsymbol{\pi} \times \mathbf{r}^2$
Parallelogram/Rhombus	$A = b \times h$
Trapezoid	$A = \frac{1}{2} \times h \times (b_1 + b_2)$
Volume: Cube	$V = s^3$
Square prism	$V = 1 \times w \times h$
Rectangular prism	$V = l \times w \times h$