

# SYMBOLS & FORMULAS

## Symbols

$a + b$	$a$ plus $b$ or $b$ added to $a$
$+a$	positive $a$
$a - b$	$a$ minus $b$ or $b$ less than $a$
$-a$	negative $a$
$a \times b, a \cdot b, ab, a(b)$	$a$ sets of $b$ or $a$ times $b$
$a \div b, \frac{a}{b}$	$a$ divided into sets of $b$ , $a$ divided into $b$ sets, or $a$ divided by $b$
$a = b$	$a$ is equal to $b$
$a \neq b$	$a$ is not equal to $b$
$a \approx b$	$a$ is approximately equal to $b$
$a > b$	$a$ is greater than $b$
$a < b$	$a$ is less than $b$
$ a $	absolute value of $a$
$a^2$	$a$ squared or $a$ to the second power
$a^3$	$a$ cubed or $a$ to the third power
$a^b$	$a$ multiplied by itself $b$ times
%	percent; per 100
$\sqrt{a}$	the square root of $a$
$\overleftrightarrow{AB}$	line AB
$\overrightarrow{AB}$	ray AB
$\overline{AB}$	line segment AB
$\angle A$	angle A
$\cong$	is congruent to
$\sim$	is similar to
$\pi$	pi, expressed as 3.14 and $\frac{22}{7}$
$\odot R$	circle R

## Formulas

### perimeter

#### square

$$P = 4 \cdot s$$

or

$$P = 4s$$

#### rectangle

$$P = (2 \cdot l) + (2 \cdot w)$$

or

$$P = 2(l + w)$$

### circumference

$$C = 2\pi r \text{ or } C = \pi d$$

### area

#### square

$$A = s^2$$

#### rectangle

$$A = l \cdot w$$

#### parallelogram

$$A = b \cdot h$$

#### triangle

$$A = \frac{1}{2}bh$$

#### circle

$$A = \pi r^2$$

### volume

#### rectangular prism

$$V = Bh$$

$$(B = l \cdot w)$$

#### cube

$$V = Bh \text{ or } V = s^3$$

$$(B = l \cdot w)$$

#### triangular prism

$$V = Bh$$

or

$$V = (\frac{1}{2}bh_1)h_2$$

$$(B = \frac{1}{2}bh)$$

#### cylinder

$$V = Bh$$

$$(B = \pi r^2)$$

### distance

$$\text{distance} = (\text{speed}) \cdot (\text{time})$$

$$d = s \cdot t$$

### speed

$$\text{speed} = (\text{distance} \div \text{time})$$

$$s = \frac{d}{t}$$

### time

$$\text{time} = (\text{distance} \div \text{speed})$$

$$t = \frac{d}{s}$$