ACT MATH SECTION CHEAT SHEET

ALGEBRA:

ZERO PRODUCT PROPERTY: If ab=0, then a=0, b=0, or a=b=0.

SYSTEMS OF EQUATIONS
How to evaluate the NUMBER of possible solutions:
When solving down a system in the form ax+by=c and dx+fy=g using elimination or substitution:

One Solution	Zero Solutions	Infinite Solutions
If you get a single x or y value, you have one solution.	If you get a statement that is never true (such as 5=6), you have no solutions.	If you get two values that always equal each other, (i.e. x=x or 0=0) you have infinite solutions.
Compare slopes! Put both equations into y=mx+b form, and compare m's (slopes)		
One Solution	**Zero Solutions**	**Infinite Solutions**
Different slopes (intercepts don't matter).	Same slopes (parallel lines), different y-intercepts.	Same slope, same intercept.

FOIL AND FACTORING:

- A **monomial** is a single product such as $4x, 7x^3$, or $8n^2$.
- A **binomial** has two elements added together such as $4x+3$ or $5n^3+3n$.
- A **polynomial** has multiple elements added together such as $5n^3+3n^2+7n+2$ or $5x^2+2x+4$.
- Difference of Squares: The product of the difference $(a-b)$ and the sum $a+b$ is equal to a squared minus b squared, $(a-b)(a+b)=a^2-b^2$.
- Square of a Sum: $(a+b)^2=a^2+2ab+b^2$.
- Square of a Difference: $(a-b)^2=a^2-2ab+b^2$.

SLOPE FORMULA: For points (x_1, y_1) and (x_2, y_2), $m=\frac{y_2-y_1}{x_2-x_1}$. Slope is RISE OVER RUN.

SLOPE-INTERCEPT FORM: $y=mx+b$
Where m is the **slope** of the line, and b is the **y-intercept** of the line at point $(0,b)$.

MIDPOINT FORMULA: The midpoint of two coordinate points (x_1, y_1) and (x_2, y_2) is:

$$\left(\frac{(x_1+x_2)}{2}, \frac{(y_1+y_2)}{2}\right)$$

DISTANCE FORMULA: Given two points, (x_1, y_1) and (x_2, y_2), the distance between them is:

$$d=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$$

SPEED AND RATES DISTANCE FORMULA: $d=rt$
WORK FORMULA: $w=rt$
COMBINED WORK FORMULA: $w=(r_1+r_2)t$

CROSS MULTIPLICATION:

$$\frac{a}{b} \times \frac{c}{d}$$

$$ad=bc$$

QUADRATICS AND POLYNOMIALS:

- VERTEX FORM: the vertex form of a parabola is: $f(x) = a(x-h)^2 + k$
  - The vertex of the parabola in this form is *(h,k)*
  - When *a* is positive, the parabola opens upwards, and the minimum is *(h,k)*.
  - When *a* is negative, the parabola opens downwards, and the minimum is *(h,k)*.
- FACTORED FORM: The factored form of a polynomial usually takes the form:

$$f(x) = a(x-n)(x-m)$$

  - When *a* is positive, the parabola opens upwards.
  - When *a* is negative, the parabola opens downwards.
  - *n* and *m* are zeros/x-intercepts of the equation and pass through the x-axis (horizontal axis)

The midpoint of 2 zeros (*n* and *m* respectively) is the x-value of the vertex.

- STANDARD FORM: the standard form of the parabola has the general form: $f(x) = ax^2 + bx + c$
  - $-\frac{b}{2a}$ is the x-value of the vertex. The y-value of the vertex can be found by plugging in this value for x and solving for *y* (or *f(x)*).
  - The vertex is always either the maximum or the minimum of the graph.
  - When *a* is positive, the parabola opens upwards.
  - When *a* is negative, the parabola opens downwards.
  - The sum of the two roots is $-\frac{b}{a}$ (not necessary to know)
  - The product of the two roots is $\frac{c}{a}$ (not necessary to know)
- QUADRATIC FORMULA: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
- FINDING SOLUTIONS USING THE DISCRIMINANT: Given that $f(x) = ax^2 + bx + c$, the discriminant is defined as $b^2 - 4ac$ (the argument under the root in the quadratic equation):
  - When this value is positive, there are two real roots.
  - When this value is 0, there is one real root.
  - When this value is negative, there are no real roots (but there are two imaginary roots).

RADICAL AND EXPONENT RULES:

EXPONENT RULES	RADICAL RULES
Zero Power Rule: $a^0 = 1$	Fractional exponent conversion: $\sqrt[c]{a^b} = a^{\frac{b}{c}}$
Negative exponent rule: $a^{-b} = \frac{1}{a^b}$	Product of radicals: $\sqrt[c]{a}\sqrt[c]{b} = \sqrt[c]{ab}$
Power of a power: $\left(a^b\right)^c = a^{bc}$	
Product of powers: $(a^b)(a^c) = a^{b+c}$	
Power of a product: $(ab)^c = a^c b^c$	
Power of a quotient: $\frac{a^b}{c^b} = \left(\frac{a}{c}\right)^b$	
Quotient of powers: $\frac{a^b}{a^c} = a^{b-c}$	

THE DEFINITION OF A LOGARITHM: $\log_c a = b$ means that $c^b = a$

COMMON LOGARITHMS: $\log x = \log_{10} x$

NATURAL LOGARITHMS: $\ln x = \log_e x$

CHANGE OF BASE FORMULA: For all positive numbers a, b, and c, where b≠1 and c≠1:

$$\log_b a = \frac{\log_c a}{\log_c b}$$

PROPERTIES OF LOGARITHMS:

- Power Property: $a \log x = \log_b x^a$
- Product Property: $\log_a x + \log_a y = \log_a xy$
- Quotient Property: $\log_a x - \log_a y = \log_a \frac{x}{y}$

DEFINITION OF LOGARITHMS:

- $n^{\log_n} = a$
- $\log_x x^n = n \log$
- Logarithm of the base: $\log_x x = 1$

CONICS:

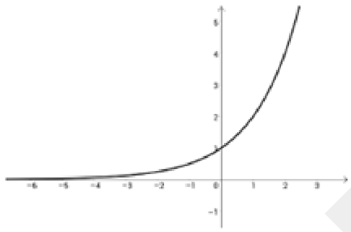
- Circle Equation: $(x-h)^2 + (y-k)^2 = r^2$ with center point at *(h,k)* and radius of r
- Ellipse Equation: $\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$ with center point at *(h,k)* and the distance from that center to the end points of the major and minor axes denoted by a and b.
- Equation of a Hyperbola: $\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$ or $\frac{(y-k)^2}{b^2} - \frac{(x-h)^2}{a^2} = 1$

- Conic Equation Types: A conic section of the form $Ax^2 + By^2 + Cx + Dy + E = 0$, in which A and B are both not zero is:
    - A circle if $A=B$.
    - A parabola if $AB=0$.
    - An ellipse if $A \neq B$ and $AB>0$.
    - A hyperbola if $AB<0$.

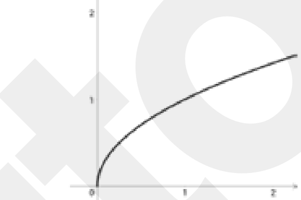
GRAPH BEHAVIOR:

Types of graphs:

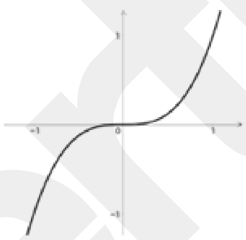
Graph of an exponential function:
Standard Form: $f(x) = a^x$
Example: $y = 2^x$



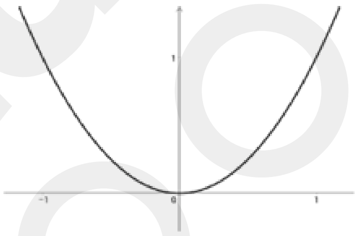
Graph of a square root:
Standard Form: $a\sqrt{x}$
Example (Parent Graph): $y = \sqrt{x}$



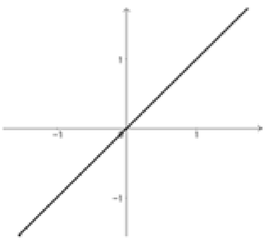
Graph of a cubic function:
Vertex Form: $y = a(x-h)^3 + k$
Example (Parent Graph): $y = x^3$



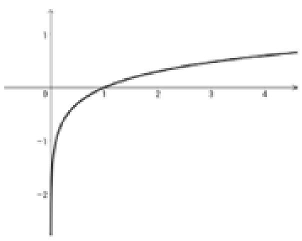
Graph of a parabola (quadratic function):
Vertex Form: $f(x) = a(x-h)^2 + k$
Example (Parent Graph): $y = x^2$



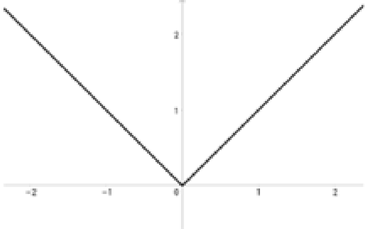
Graph of a linear equation:
Slope-Intercept Form: $y = mx + b$
Example (Parent form): $y = x$



Graph of a logarithmic function:
Standard Form: $y = \log_a x$
Example: $y = \log_{10} x$



Graph of an absolute value function:
Vertex Form: $y = a|x-h| + k$
Example (Parent Graph): $y = |x|$



- Horizontal Shift: For ALL functions, if you replace all instances of x in a function with "$(x-h)$" you'll find that the graph moves "h" units to the right.
- Vertical Shift: If you replace all instances of y in a function with "$(y-k)$" you'll find that the graph moves "k" units upward.

END BEHAVIOR:

Degree: Even	Degree: Even
Leading Coefficient: positive	Leading Coefficient: negative
End Behavior: *f(x)* approaches +∞ at both ends of the graph (upward facing)	End Behavior: *f(x)* approaches -∞ at both ends of the graph (downward facing)
Domain: all reals	Domain: all reals
Range: all reals ≥ maximum	Range: all reals ≤ maximum
Example: $y = x^2$	Example: $y = -2x^6 + 3x^5 + 4x$

Degree: Odd	Degree: Odd
Leading Coefficient: positive	Leading Coefficient: negative
End Behavior: At graph left, f(x)→-∞. At graph right, f(x)→+∞ (upward sloping)	End Behavior: At graph left, f(x)→+∞ . At graph right, f(x)→-∞ (downward sloping)
Domain: all reals	Domain: all reals
Range: all reals	Range: all reals
Example: $f(x) = x^3$	Example: $f(x) = -3x^5 - 2x$

TRANSLATIONS AND REFLECTIONS:

- Reflectional symmetry: the property a figure has if half of the figure is congruent to the other half over an axis.
- Rotational symmetry: also known as radial symmetry—the property a figure has if it is congruent to itself after some rotation less than 360°.

NUMBERS & STATS:

KEY MATH TERMS (Most important only, see chapters for more & for divisibility rules)

INTEGER: A number that is a whole number and includes no fraction or decimal parts. Integers can be negative, zero or positive. (Examples: -400, -7, 0, 1, 3, 56, 230).

ZERO: A number that is **even** and **neither positive nor negative**. Also, an integer. Numbers cannot be divided by zero, and zero cannot be the value of the denominator (bottom) of a fraction. Sometimes, this word is also used to indicate an x-intercept of a polynomial (when y is zero and x is a number).

PRIME NUMBER: A number for which the only factors are itself and 1.
<u>IMPORTANT: (one) is **NOT** a prime number!</u>

LEAST COMMON MULTIPLE: The least common multiple of two or more numbers, often abbreviated as LCM, is the smallest whole number that has those two or more numbers among its factors. For example, the LCM of 2 and 3 is 6, since it is the smallest whole number that has both 2 and 3 among its factors.

GREATEST COMMON FACTOR: The greatest common factor of two or more numbers, often abbreviated as GCF, is the largest whole number that is a factor of all the numbers. For example, the GCF of 18 and 24 is 6 because 6 is the largest whole number that is a factor of 18 and 24.

KNOW THE FOLLOWING RULES OF HOW ODD & EVEN NUMBERS WORK:

An ODD times an ODD is an ODD: $(3)(3)=9$
An EVEN times ANYTHING is EVEN: $2(17)=34$; $4(6)=24$
An ODD plus an ODD is EVEN: $7+5=12$
An EVEN plus an EVEN is EVEN: $4+8=12$
An EVEN plus an ODD is ODD: $2+5=7$
An EVEN exponent creates a positive solution: $(-2)^4=16$
An ODD exponent keeps the sign (+ or –) the same: $(-3)^3=-27$

PERCENTS

TO CALCULATE PERCENT OF INCREASE OR DECREASE

$$\frac{New\ Number - Original\ Number}{Original\ Number}\times 100$$

TO APPLY PERCENT INCREASE OR DECREASE

$$Original\ Amount + \frac{Percent\ Increase}{100}\left(Original\ Amount\right) = Total\ Amount$$

SEQUENCES:

FORMULA FOR THE n^{th} TERM OF AN ARITHMETIC SEQUENCE

$$a_n = a_1 + (n-1)d$$

Where a_n is the n^{th} term in the sequence, a_1 is the first term in the sequence, n is the number of the term in the sequence, and d is the common difference.

FORMULA FOR THE n^{th} TERM OF A GEOMETRIC SEQUENCE

To find the n^{th} term in a geometric sequence, where a_n is the n^{th} term in the sequence, a_1 is the first term in the sequence, and r is the common ratio (what we multiply each subsequent term by):

$$a_n = a_1 r^{n-1}$$

AVERAGES (MEAN, MEDIAN, MODE, RANGE)

Mean (Average)

MEAN and AVERAGE are the same thing: the average value of a set of numbers, found by adding all of the numbers in a set and then dividing by the number of items in the set (below, left).

THE AVERAGE FORMULA

$$AVERAGE = \frac{SUM\ OF\ ALL\ ITEMS}{NUMBER\ OF\ ITEMS} \text{ or } SUM = (average)(\#\ of\ items)$$

Median

If you line up a set of numbers in **numerical (chronological) order,** and you find the number physically in the middle of this list, that number is called the MEDIAN. If there are an even number of items in a list, then average the two middle values.

Mode

The mode occurs most often in a set. I like to think that **MO**de and **MO**st both start with "**MO**" to remember this one. You can have multiple modes.

Range

The range of a set of values is the difference between the greatest value and the least value.

Standard Deviation

Essentially standard deviation measures how tightly packed a set of data is about the mean.

AVERAGE RATE FORMULA

$$AVERAGE\ (ELEMENT\ A)\ per\ (ELEMENT\ B) = \frac{TOTAL\ OF\ ALL\ ELEMENTS\ A}{TOTAL\ OF\ ALL\ ELEMENTS\ B}$$

AVERAGE SPEED FORMULA

$$Average\ Speed = \frac{TOTAL\ DISTANCE}{TOTAL\ TIME}$$

ARRANGEMENTS & PROBABILITY

THE FUNDAMENTAL COUNTING PRINCIPLE

If there are m ways to do one thing, and n ways to do another thing, and assuming that each "thing" is unique (or that the order of these things matters), there are m times n ways to do both.

FACTORIAL (DEFINITION)

If n is a positive integer, then $n! = n(n-1)(n-2)(n-3)\ldots$

Example: $5\times4\times3\times2\times1$ is written $5!$ and is read 5 factorial.
By definition, $0! = 1$.

GENERAL PERMUTATIONS (distinct items that are dependent events, order matters)	COMBINATIONS (order doesn't matter, unique elements)
$_nP_r = \frac{n!}{(n-r)!}$ where n is the # of items taken r at a time.	$_nC_r = \frac{n!}{r!(n-r)!}$ Where n is the # of choices taken r at a time.

BASIC PROBABILITY FORMULA

$$\frac{Number\ of\ possible\ desired\ outcomes}{Number\ of\ total\ possible\ outcomes}$$

TRIG IDENTITIES & FORMULAS

$$\tan\theta = \frac{\sin\theta}{\cos\theta}$$

$$sin^2\theta + cos^2\theta = 1$$

$$sec^2\theta - tan^2\theta = 1$$

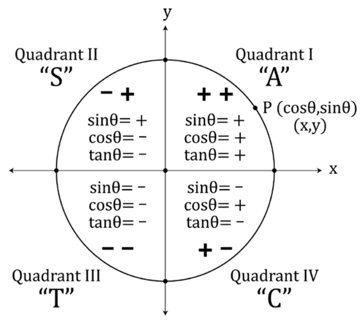
$$csc^2\theta - cot^2\theta = 1$$

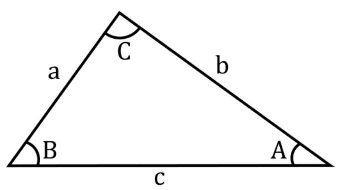
$$\cos(2\theta) = \cos^2\theta - \sin^2\theta$$

$$\sin(2\theta) = 2\sin\theta\cos\theta$$

Law of Sines: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Law of Cosines: $c^2 = a^2 + b^2 - 2ab\cos(C)$

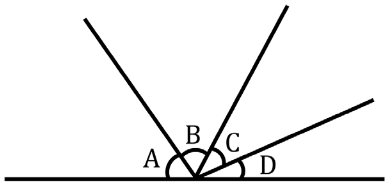




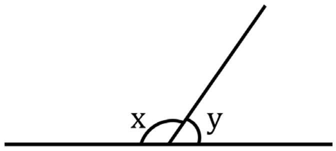
There are π radians in 180 degrees, or 2π radians in 360 degrees: $\pi = 180°$ $2\pi = 360°$

GEOMETRY

STRAIGHT LINES AND CIRCLES



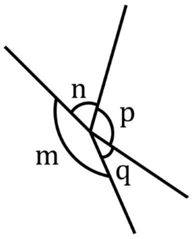
$A+B+C+D=180°$



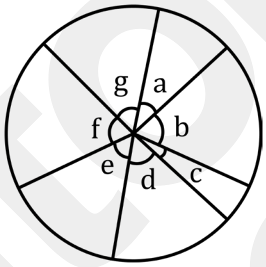
$x+y=180°$

Straight lines represent 180°. Anytime you see two or more angles popping out to one side of a straight line, these angles must sum to 180°.

The sum of all the angles formed by lines that all converge at a single point (like spokes of a bicycle, or a “circle” of angles) is 360°. Similarly, the interior angles of a circle always sum to 360°.



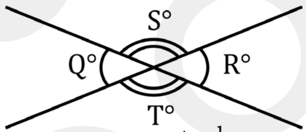
$m+n+p+q=360°$



$a+b+c+d+e+f+g=360°$

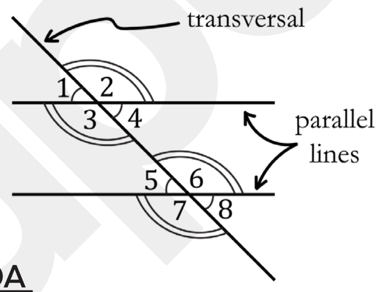
VERTICAL ANGLES

Q and R are vertical angles, as are S and T.



The vertical angles theorem states that vertical angles are congruent; above, angle Q and R equal each other, and angle S and T equal each other.

PARALLEL LINES THEOREM



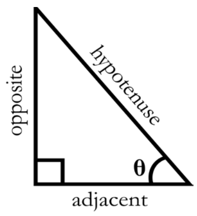
$\angle 1 = \angle 4 = \angle 5 = \angle 8$ (small angles)

$\angle 2 = \angle 3 = \angle 6 = \angle 7$ (big angles)

Any small angle plus any big angle = 180°

SOHCAHTOA

Trigonometric function	Abbreviation	Acronym	Is equal to
Sine	sin	SOH	**O**pposite leg divided by **H**ypotenuse
Cosine	cos	CAH	**A**djacent leg divided by **H**ypotenuse
Tangent	tan	TOA	**O**pposite leg divided by **A**djacent leg



$\sin(\theta)=\dfrac{opposite}{hypotenuse}$	$\tan(\theta)=\dfrac{opposite}{adjacent}$	$sec\theta=\dfrac{1}{\cos\theta}=\dfrac{hypotenuse}{adjacent}$
$\cos(\theta)=\dfrac{adjacent}{hypotenuse}$	$cot\theta=\dfrac{1}{\tan\theta}=\dfrac{adjacent}{opposite}$	$csc\theta=\dfrac{1}{\sin\theta}=\dfrac{hypotenuse}{opposite}$

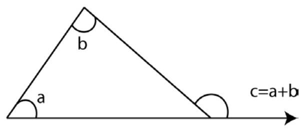
TRIANGLES

TRIANGLE SUM THEOREM

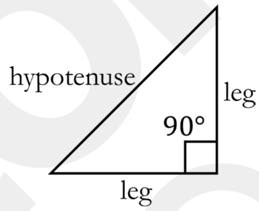
The sum of the three angles in any triangle must equal $180°$.

EXTERIOR ANGLE THEOREM

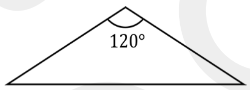
The exterior angle of a triangle is equal to the sum of the remote interior angles.
$a+b=c$, where c is the exterior angle and a and b are remote interior angles.



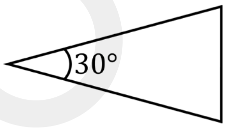
Right Triangle One angle is 90 degrees. The longest side is a hypotenuse. The shorter two sides are legs.



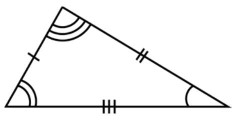
Obtuse Triangle One angle is greater than 90 degrees.



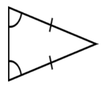
Acute Triangle All angles are less than 90 degrees.



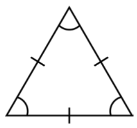
Scalene Triangle All sides are unequal. Therefore, all angles will be unequal as well.



Isosceles Triangle At least two sides are congruent. The angles opposite those sides are also congruent.



Equilateral Triangle All sides are congruent. All angles of an equilateral triangle will be 60 degrees.



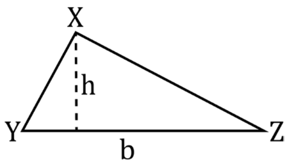
TRIANGLE SIMILARITY:

AA: If two angles are congruent to two angles of another triangle, then the triangles must be similar.

SSS: If all the corresponding sides of two triangles are in the same proportion, then the two triangles must be similar.

SAS: If one angle of a triangle is congruent to the corresponding angle of another triangle and the lengths of the sides adjacent to the angle are proportional, then the triangles must be similar.

TRIANGLE AREA

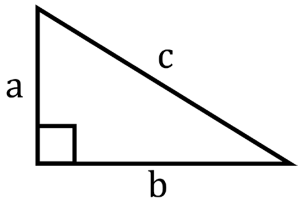


$$A = \frac{1}{2}bh$$

Where b is the measurement of the base of the triangle and h is the measurement of the height of the triangle.

The **perimeter** of a triangle is the sum of its sides.

Perimeter $= s_1 + s_2 + s_3$



PYTHAGOREAN THEOREM

For any right triangle with side lengths a, b and c, where c is the longest side (opposite 90 degrees), or hypotenuse:

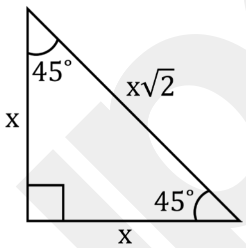
$$a^2 + b^2 = c^2$$

PYTHAGOREAN TRIPLES

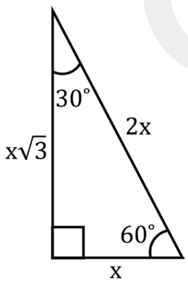
A Pythagorean triple consists of three positive integers a, b, and c such that $a^2 + b^2 = c^2$. Such a triple is commonly written (a,b,c). Some well-known examples are:

$$(3,4,5), (5,12,13), (8,15,17), \& \ (7,24,25).$$

Special Triangle: 45-45-90



Special Triangle: 30-60-90



TRIANGLE INEQUALITY THEOREM, TRIANGLE WITH SIDES A, B, C

$$a + b > c$$
$$a + c > b$$
$$b + c > a$$

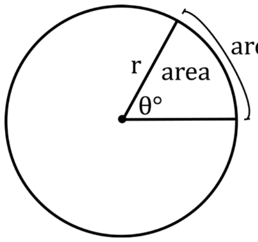
TRIANGLE CONGRUENCY:

ASA: If two angles are congruent to two angles of another triangle, and the side between them is congruent, then the triangles must be congruent.

SSS: If all the corresponding sides of two triangles are congruent, then the two triangles must be congruent.

SAS: If one angle of a triangle is congruent to the corresponding angle of another triangle and the lengths of the sides adjacent to the angle are congruent, then the triangles must be congruent.

CIRCLES



AREA OF A SECTOR FORMULA

$$\frac{\text{SECTOR AREA}}{\text{TOTAL AREA}} = \frac{\theta^\circ}{360^\circ}$$

$$\frac{S}{\pi r^2} = \frac{\theta^\circ}{360^\circ} \quad \text{or} \quad S = \frac{\theta^\circ}{360^\circ}\pi r^2 \quad \text{or} \quad S = \frac{\theta^\circ}{360^\circ}A$$

Where A is the area of the whole circle, S is the area of the sector, θ is the measure of the sector angle in degrees, and r is the radius.

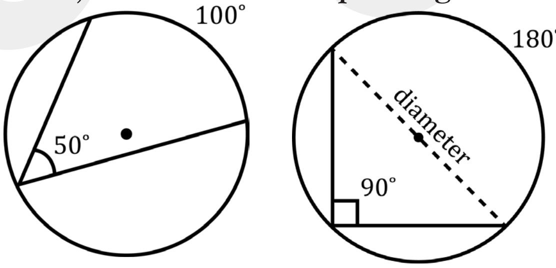
ARC LENGTH FORMULA

$$\frac{\text{ARC LENGTH}}{\text{TOTAL CIRCUMFERENCE}} = \frac{\theta^\circ}{360^\circ}$$

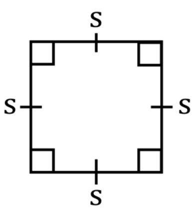
$$\frac{L}{2\pi r} = \frac{\theta^\circ}{360^\circ} \quad \text{or} \quad L = \frac{\theta^\circ}{360^\circ}2\pi r \quad \text{or} \quad L = \frac{\theta^\circ}{360^\circ}C$$

Where L is the arc length, C is the circumference of the circle, θ is the measure of the sector angle in degrees, and r is the radius.

Inscribed angles (formed by two chords) are **half the corresponding arc measure**.

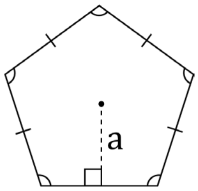


POLYGONS



AREA AND PERIMETER OF A SQUARE

$$\textit{Area} = \textit{side length squared} \text{ or } s^2$$
$$\textit{Perimeter} = 4s$$

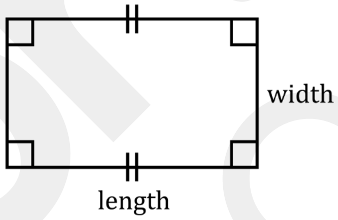


$$Area\ for\ Regular\ Polygons = \frac{apothem \times perimeter}{2}$$

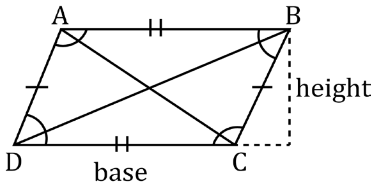
Where the apothem (a) is the length of the distance from the center of the shape to a side at a right angle.

AREA OF A RECTANGLE

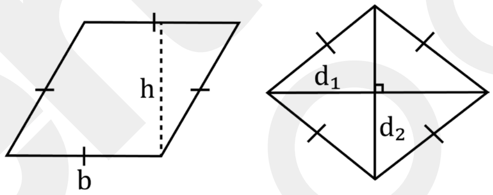
$$Area = length \times width$$



AREA OF A PARALLELOGRAM



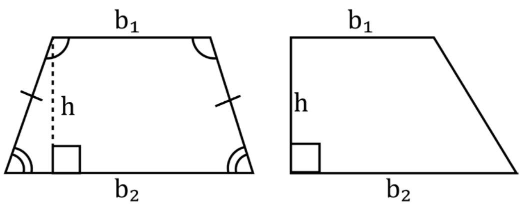
$$Area = base \times height$$



AREA OF A RHOMBUS

$$Area = bh \text{ or } \frac{d_1 \times d_2}{2}$$

Where b is the base, h is the height and d_1 and d_2 are the diagonals.



AREA OF A TRAPEZOID

$$Area = h\left(\frac{b_1 + b_2}{2}\right)$$

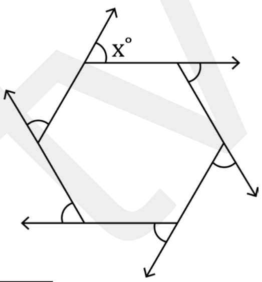
Where h is the height, and b_1 and b_2 are the base lengths.

SUM OF INTERIOR ANGLES

The sum of the interior angles in a polygon $= (n-2)180$, where n is the number of sides on the polygon.

EXTERIOR ANGLE OF REGULAR POLYGONS

The measure of a single exterior angle of **regular polygon** $= \dfrac{360}{n}$, where the shape has n-sides.



NUMBER OF DIAGONALS OF A POLYGON

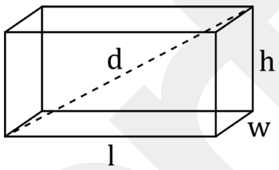
$$Number\ of\ Diagonals\ in\ a\ polygon\ of\ n-sides = \frac{n(n-3)}{2}$$

SURFACE AREA RATIO

If two solids are similar with sides, heights, or other one dimensional attributes in a ratio of $a:b$, (i.e. the scale factor is $a:b$) then the surface areas are in a ratio of $\left(\dfrac{a}{b}\right)^2$.

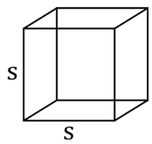
THE SUPER PYTHAGOREAN THEOREM

$$d = \sqrt{l^2 + w^2 + h^2}$$



SURFACE AREA AND VOLUME OF A CUBE

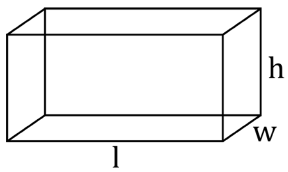
Surface Area $= 6s^2$, where s is the side length
Volume $= s^3$, where s is the side length



VOLUME AND SURFACE AREA OF A RECTANGULAR PRISM

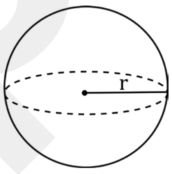
Volume $= lwh$, where l is the length, w the width, and h the height

Surface Area $= 2lw + 2lh + 2wh$



VOLUME & SURFACE AREA OF A SPHERE

Volume $= \dfrac{4}{3}\pi r^3$
Surface Area $= 4\pi(r)^2$

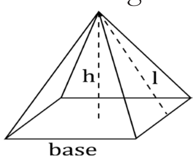


SURFACE AREA/VOLUME OF A PYRAMID

Surface Area = Area of Base + Area of Each Lateral Triangle

$(\dfrac{1}{2}$(Slant length × Base Length))

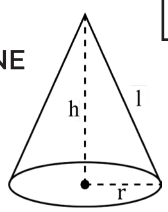
Volume $= \dfrac{1}{3}(\text{area of base})h$



SURFACE AREA & VOLUME OF A RIGHT CIRCULAR CONE

Surface Area $= \pi r^2 + \pi rl$,

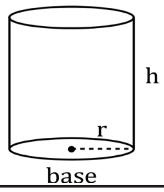
Volume $= \left(\dfrac{1}{3}\right)\pi r^2 h$,

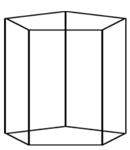


SURFACE AREA OF A CYLINDER

Surface Area $= 2(\pi r^2) + 2\pi r(h)$,

Volume $= \pi r^2 h$





VOLUME OF A PRISM

The **volume of a prism** (when at a right angle to the ground) $= \boldsymbol{Bh}$, where B is the area of the base and h is the height.

