

ACT PREP – MATH EQUATIONS TO KNOW

Distance Formula (motion): _____

RULES FOR EXPONENTS

1. $x^a \cdot x^b =$ _____

2. $\frac{x^a}{x^b} =$ _____

3. $(x^a)^b =$ _____

4. $x^0 =$ _____

5. $x^{-a} =$ _____

6. $\sqrt[n]{x} =$ _____

Quadratic Equation: _____

Area of a Parallelogram: _____

Area of a Triangle: _____

Area of a Trapezoid: _____

Area of a Rhombus: _____

Area of a Circle: _____

Circumference of a Circle: _____

Volume of a Rectangular Prism: _____

Volume of a Prism: _____

Volume of a Cylinder: _____

Pythagorean Theorem: _____

Pythagorean Triples (4 main ones): _____

SPECIAL RIGHT TRIANGLES

$30^\circ - 60^\circ - 90^\circ$

$45^\circ - 45^\circ - 90^\circ$

Sum of the Interior Angles of a Polygon: _____

Sum of the Exterior Angles in a Polygon: _____

Number of Diagonals in a Polygon: _____

Slope-Intercept Form: _____

Point-Slope Form: _____

Standard Form: _____

Slope Formula: _____

Midpoint Formula: _____

Distance Between Two Points: _____

Equation of a Circle: _____

$i = \underline{\hspace{2cm}}$

$i^2 = \underline{\hspace{2cm}}$

PROPERTIES OF LOGARITHMS

1. $\log_b(xy) = \underline{\hspace{2cm}}$

2. $\log_b\left(\frac{x}{y}\right) = \underline{\hspace{2cm}}$

3. $\log_b x^n = \underline{\hspace{2cm}}$

4. $\log_b x = \underline{\hspace{2cm}}$

TRIGONOMETRY

$\sin \theta = \underline{\hspace{2cm}}$

$\csc \theta = \underline{\hspace{2cm}}$

$\cos \theta = \underline{\hspace{2cm}}$

$\sec \theta = \underline{\hspace{2cm}}$

$\tan \theta = \underline{\hspace{2cm}}$

$\cot \theta = \underline{\hspace{2cm}}$

RECIPROCAL IDENTITIES

$\sin \theta = \underline{\hspace{2cm}}$

$\csc \theta = \underline{\hspace{2cm}}$

$\cos \theta = \underline{\hspace{2cm}}$

$\sec \theta = \underline{\hspace{2cm}}$

$\tan \theta = \underline{\hspace{2cm}}$

$\cot \theta = \underline{\hspace{2cm}}$

PYTHAGOREN IDENTITIES

1. $\underline{\hspace{2cm}}$

2. $\underline{\hspace{2cm}}$

3. $\underline{\hspace{2cm}}$

The Law of Sines: $\underline{\hspace{10cm}}$

The Law of Cosines: $\underline{\hspace{10cm}}$

$\underline{\hspace{10cm}}$

Standard Form for a Quadratic Equation: $\underline{\hspace{10cm}}$

Vertex Form for a Quadratic Equation: $\underline{\hspace{10cm}}$

Vertex Formula: $\underline{\hspace{10cm}}$

Arc Length Formula: $\underline{\hspace{10cm}}$

Equation for an Arithmetic Sequence: $\underline{\hspace{10cm}}$

Sum of the first n terms in an Arithmetic Sequence: $\underline{\hspace{10cm}}$

