

**Suggested List of Mathematical Language**

**Algebra 2 & Trigonometry**

**Problem Solving**

algebraically  
 alternate approach  
 collaborate  
 conjecture  
 constraint  
 critique  
 equivalent  
 evaluate  
 explain  
 formulate  
 generalization  
 graphically  
 interpret  
 multiple representations  
 numerically  
 observe  
 parameter  
 strategy  
 verbally

**Reasoning and Proof**

argument  
 axiom  
 conclusion  
 conjecture  
 counterexample  
 discover  
 exact answer  
 explain  
 explore  
 general case  
 inductive reasoning

informal indirect proof  
 investigate  
 justify  
 refute  
 specific result  
 theorem

**Communication**

accuracy  
 appropriate  
 challenge  
 chart  
 coherent  
 comprehension  
 conjecture  
 decoding  
 diagram  
 equation  
 formula  
 function  
 graph  
 interpretation  
 logical argument  
 mathematical representation  
 numerical tables  
 organize  
 outline  
 rationale  
 reflect  
 standard notation  
 strategy  
 symbol  
 technical writing  
 terminology

validity  
verbal explanation  
written explanation

## Connections

concept  
conclusion  
formulate  
multiple representation  
physical model  
procedure  
quantitative model  
representation

## Representation

algebraic representation  
apply  
chart  
communicate  
compare  
concept  
diagram  
equation  
explore  
graph  
graphical representation  
investigate  
mathematical phenomena  
multiple representations  
organize  
physical object  
physical phenomena  
recognize  
record  
social phenomena  
symbol  
table  
technology  
translate

## Number Sense and Operations

$a+bi$  form  
absolute value

complex fraction  
complex number  
conjugate  
direct variation  
 $e$   
fractional exponent  
 $i$   
imaginary number  
index of a radical  
inverse variation  
irrational number  
negative exponent  
 $n$ th root  
operation  
 $\pi$   
powers of  $i$   
principal square root  
procedure  
radical  
radical form  
radicand  
rational number  
rationalize a denominator  
real number  
scientific notation  
sigma  
sigma notation

## Algebra

abscissa  
absolute value  
absolute value equation  
absolute value function  
absolute value inequality  
adjacent angles  
adjacent sides  
algebraic expression  
algebraic representation  
ambiguous case  
amplitude  
analyze  
angle  
angle in standard position  
angle of depression  
angle of elevation

antilogarithm  
approximate value  
arc length  
arccosine  
arcsine  
arctangent  
area of a parallelogram using SAS  
area of a triangle using SAS  
arithmetic sequence  
arithmetic series  
asymptote  
base  
base of a logarithmic function  
base of an exponential function  
binomial expansion  
binomial theorem  
center-radius equation of a circle  
central angle  
circle  
circular functions  
coefficient  
cofunctions  
common base(s)  
common difference  
common factor  
common logarithm  
common ratio  
completing the square  
complex fractional expressions  
composition of functions  
compound interest  
constant function  
cosecant  
cosine  
cotangent  
coterminal angles  
degree of a polynomial  
difference of two perfect squares  
direct variation  
discriminant  
domain  
double and half angle formulas for  
trigonometric functions  
double root  
e  
equation  
equivalent forms  
exact value  
expand a binomial  
explicit definition  
exponential form  
exponential function  
extraneous root  
factor  
fractional exponent  
frequency (of a periodic function)  
function  
function notation  
geometric sequence  
geometric series  
graphical solution of equations  
greatest common factor (GCF)  
growth factor  
half-life  
horizontal-line test  
*i*  
identities  
initial side of an angle  
inverse function  
inverse trigonometric functions  
inverse variation  
Law of Cosines  
Law of Sines  
laws of exponents  
laws of logarithms  
linear equation  
linear expression  
linear system  
logarithm  
logarithmic form  
lowest terms  
nature of the roots  
negative exponent  
nth root  
nth term  
one cycle of a trigonometric function  
one-to-one function  
onto  
opposite side in a right triangle  
ordinate  
parabola  
parameter

period (of a function)  
periodic function  
phase shift  
polynomial expression  
polynomial function  
powers of  $i$   
Pythagorean identities  
quadrantal angle  
quadratic equation  
quadratic formula  
quadratic inequality  
quadratic trinomial  
radian  
radical equation  
radical expression  
radius  
range (of a function)  
rational coefficient  
rational equation  
rational expression  
rational inequality  
rationalize denominators  
reciprocal trigonometric functions  
recursive definition  
reference angle  
relation  
replacement set  
represent  
restricted domain  
resultant  
right triangle trigonometry  
root of an equation  
secant (of an angle)  
sigma notation  
sine  
solution set  
standard position (of an angle)  
subset  
sum and product of roots of a quadratic equation  
sum of a geometric series  
sum of an arithmetic series  
sum or difference formulas for trigonometric functions  
system of equations/inequalities  
tangent (of an angle)

technology  
terminal side of an angle  
transformation  
transformations of functions and relations  
trigonometric equation  
trigonometric functions  
unit circle  
variable  
vector  
vertical line test  
zero of a function  
zero product property

## **Geometry**

absolute value  
absolute value equation  
absolute value inequality  
angle in standard position  
angle of depression  
angle of elevation  
area of a parallelogram using SAS  
area of a triangle using SAS  
circle  
coefficient  
function  
generalize  
geometric representation of the circular function  
graph of a relation  
graphical representation  
graphical solution of equations  
investigate  
ordered pair  
parabola  
rational coefficient  
rectangular coordinates  
relation  
root of an equation  
sector of a circle  
slope  
triangle  
vertex  
visualization

## **Measurement**

arc length  
degree measure  
measure of central angle  
minute  
radian measure

## **Statistics and Probability**

at least  
at most  
Bernouli experiments  
biased sample  
bimodal  
binomial probability formula  
bivariate data  
central tendency  
combination  
compound event  
conjecture  
controlled experiment  
correlation coefficient  
Counting Principle  
exactly  
experimental probability  
extrapolate  
frequency (of a data set)  
frequency distribution  
grouped frequency distributions  
index in statistics  
interpolate  
interquartile range  
least squares regression line  
line of best fit  
linear regression  
mean  
measure of central tendency  
measures of dispersion  
median  
mode  
normal curve  
normal distribution  
observation  
outlier  
Pascal's Triangle

percentile  
permutation  
probability  
quartiles  
random sample  
range (of a data set)  
regression equation  
regression model  
sample space  
scatter plot  
standard deviation (population)  
standard deviation (sample)  
statistics  
survey  
technology  
theoretical probability  
univariate data  
variance (population)  
variance (sample)