NOTES						
1)	Vector V_1: $a_1i+b_1j+c_1k$					
	Vector V_2: $a_2i+b_2j+c_2k$					
	Vector V_3: $a_3i+b_3j+c_3k$					
2)	Expr=Expression	No equality or inequality sign				
	Name	**Function**	**Example**	**Menu**		
	1^{st} Derivative	**de**(*Expr,Var*)	Find derivative of x^3 $de(x^3,x)$			
	2^{nd} Derivative	**dd**(*Expr,Var*)	Find 2^{nd} derivative of x^3 $dd(x^3,x)$			
	1^{nd} Derivative at a Point	**nde**(*Expr,Var,Point*)	Find 1^{st} derivative of x^3 at x=2 $nde(x^3,x,2)$			
	2^{nd} Derivative at a Point	**ndd**(*Expr,Var,Point*)	Find 2^{nd} derivative of x^3 at x=2 $ndd(x^3,x,2)$			
A	**Absolute Area**	**aa**(*Expr,Lower.B,Upper.B*)	Find Area of sin(x),from 0 to 2π $aa(\sin(x),0,2\cdot\pi)$			
	All points of a function	**all**(*Expr*)	Find all stationary points. $all(x^3-1)$			
	Angle (Vector)	**ang**(a_1,b_1,c_1,a_2,b_2,c_2) *Only for vectors, not for Complex Number.	Find angle between √3**i**+4**j**-**k** and 1**i**-4**j**+√3**k** $ang(\sqrt[2]{3},4,-1,1,-4,\sqrt[2]{3})$			
	Approximate To Fraction	**▸approxFraction**	0.565▸approxFraction(5.E-14)	1	2	
C	**Cartesian to Polar**	**ctp**(*Real component,Imaginery comp.*)	Convert 2+√3**i** to Polar form $ctp(2,\sqrt[2]{3})$			
	Cisroot	**cr**(*radius,angle,root power*)	Find roots of $z^5=-26$ $cr(26,\pi,5)$			
	Complete Square (Circle & Ellipse)	**cs**(5 *Coefficients*) See Example	Find the circle graphed by $x^2-6x+y^2+4y=b$ $cs(1,-6,1,4,-b)$			
	Complex Factor	**cFactor**(*Expr,Var*)	Factorize z^2+z**i** cFactor($z^2+z\cdot ii,z$)	3	C	2

	Complex Roots of Polynomial	**cPolyroots**(*Polynomial,Var*) **cPolyroots**(*{List all coefficients}*)	Find roots of $z^4+3z^3+5z^2-z-8$ $\boxed{\text{cPolyRoots}(z^4+3\cdot z^3+5\cdot z^2-z-8,z)}$ $\boxed{\text{cPolyRoots}(\{1,3,5,-1,-8\})}$	3	8	3
	CompleteSquare	**completeSquare(**Expr,Var,DepVar)	$\boxed{\text{completeSquare}(4\cdot x^2+8\cdot x+y^2-6\cdot y+12,x,y)}$	3	5	
	Complex Solve	**cSolve**(*Equation,Var*) *Avoid using z as it is already defined as x+y**i**	Find roots of $x^3=-1$ $\boxed{\text{cSolve}(x^3=-1,x)}$	3	C	1
D	**Derivative at a Point**	**nde**(*Expr,Var,Point*)	Find derivative of x^2 at x=2 $\boxed{nde(x^2,x,2)}$			
	Differential Equation Solver	**Desolve** (*1st/2nd DE equation,Var,DepVar*) or **Desolve** (*DE equation and other conditions,Var,DepVar*)	$\boxed{\text{deSolve}(2\cdot x'-x^2-4=0,t,x)}$ $\boxed{\text{deSolve}(y''=2\cdot e^x\cdot \sin(x) \text{ and } y(0)=0 \text{ and } y'(0)=0,x,y)}$ *Use Prime Symbol	4	D	
	Domain	**Domain**(*Expr,Var*)	Find vertical Asymptote of $\frac{x-4}{x(x-4)}$ $\boxed{\text{domain}\left(\frac{x-4}{x\cdot(x-4)},x\right)}$			
E	**Euler's Method**	**eu**(*Expr,x_0,y_0,Step*)	$\boxed{eu\left(\frac{1}{3+3\cdot x+x^2},0,1,0.1\right)}$			
I	**Implicit Differentiation**	**impDif**(*Equation,Var,DepVar*)	Find 1st derivative of $x^2+y=8$ $\boxed{\text{impDif}(x^2+y=8,x,y)}$	4	E	
	Initial differential Eq. Solver	**ids**(*Expr,Var,DepVar,Var_iValue,Depvar _iValue*)	$\boxed{ids\left(\frac{x^2+4}{2},t,x,0,2\right)}$			
L	**Linear Dependency**	**dep**(*a_1,b_1,c_1,a_2,b_2,c_2, a_3,b_3,c_3*)	Find m if m**i**+**j**+**k**, **i**+m**j**+**k** and **i**+**j**m**k** are independent $\boxed{dep(m,1,1,1,m,1,1,1,m)}$			
	Linear Solution	**ls**(*6 Coefficients,Var*) See Example.	Find a for ax-3y=5 and -ax+(8-a)y=a to have no solution. $\boxed{ls(a,-3,5,3,-a,8-a,a)}$			
M	**Magnitude (Vector)**	**mag**(*a_1,b_1,c_1*)	Find magnitude of 2**i**+6**j**-(√3-2)**k** $\boxed{mag(2,6,2-\sqrt[2]{3})}$			
N	**Normal Line**	**NormalLine**(*Expr,Var,Point*)	Find equation for the normal, for x^2 at x=1. $\boxed{\text{normalLine}(x^2,x,1)}$	4	A	

	Perpendicular	**pd**(a_1,b_1,c_1,a_2,b_2,c_2,*Var*)	Find m if m**i**+5**j**+6**k** and 7**i**+2**j**+m**k** are perpendicular $\boxed{pd(m,5,6,7,2,m,m)}$			
P	**Polar to Cartesian**	**ptc**(*Radius*,*Angle*)	Convert 2cis($\frac{7\pi}{2}$) to cartesian form. $\boxed{ptc\left(2,\frac{7\cdot\pi}{2}\right)}$			
	Proper Fraction	**pf**(*Expr*)	Find asymptotes of $\frac{2x^3+x^2-1}{x^2-x-2}$ $\boxed{pf\left(\frac{2\cdot x^3+x^2-1}{x^2-x-2}\right)}$			
	Tangent Line	**TangentLine**(*Expr*,*Var*,*Point*)	Find the tangent of x^2 at x=1 $\boxed{\text{tangentLine}(x^2,x,1)}$	4	9	
T	**Test Function**	**tf**(*Equation*,*var1*,*var2*,*var1_value*,*var2_ value*)	If f(x)=2f(x), a possible rule for f is? $\boxed{tf(f(x)=2\cdot f(x),x,3,y,6)}$ *Since there isn't a 2nd variable, just type a random variable and assign a random value.			
	Trigonometry Collect	**tExpand**(*Expr*)	$\boxed{\text{tExpand}(\cos(2\cdot x))}$	3	B	2
	Trigonometry Expand	**tCollect**(*Expr*)	$\boxed{\text{tCollect}(2\cdot(\cos(x))^2-1)}$	3	B	1
U	**Unit Vector**	Unit Vector of V_1 **uv**(a_1,b_1,c_1)	Unit Vector of 2**i**+4**j**+7**k** $\boxed{uv(2,4,7)}$			
V	**Vector Resolute Parallel**	Vector Resolute of V_1 in the direction of V_2 **vpl**(a_1,b_1,c_1,a_2,b_2,c_2)	Vector resolute of 5**i**+3**j**+7**k** in the direction of 6**i**+2**j**+6**k** $\boxed{vpl(5,3,7,6,2,6)}$			
	Vector Resolute Perpendicular	Vector Resolute of V_1 perpendicular to V_2 **vpd**(a_1,b_1,c_1,a_2,b_2,c_2)	Vector resolute of **i**-2**j**1**k** perpendicular to 2**i**-3**j** $\boxed{vpd(1,-2,1,2,-3,0)}$			