>> syms x

>> y

y =

x^2 - 5\*x + 6

>> % Equation of the tangent line at x = 3

>> YCoorPt = subs(y,x,3)

YCoorPt =

0

>> DerivY = diff(y)

DerivY =

2\*x - 5

>> SlopeLine = subs(DerivY,x,3)

SlopeLine =

1

>> EquationTangentLine = SlopeLine\*(x-3)+YCoorPt

EquationTangentLine =

x – 3

>> q

q =

(x^2 - 5\*x + 6)/(x^2 - 9)

>> [Num Den]=numdem(q)

??? Undefined function or method 'numdem'

for input arguments of type 'sym'.

>> [Num Den]=numden(q)

Num =

x^2 - 5\*x + 6

Den =

x^2 - 9

>> Answers = solve(y)

Answers =

2

3

>> QuadraticFormula = solve('a\*x^2+b\*x+c')

QuadraticFormula =

-(b + (b^2 - 4\*a\*c)^(1/2))/(2\*a)

-(b - (b^2 - 4\*a\*c)^(1/2))/(2\*a)

>> QuadraticFormula = solve('a\*x^2+b\*x+c',a)

QuadraticFormula =

-(b + (b^2 - 4\*a\*c)^(1/2))/(2\*a)

-(b - (b^2 - 4\*a\*c)^(1/2))/(2\*a)

>> QuadraticFormula = solve('a\*x^2+b\*x+c',c)

??? Undefined function or variable 'c'.

>> QuadraticFormula = solve('a\*x^2+b\*x+c','c')

QuadraticFormula =

- a\*x^2 - b\*x

>> QuadraticFormula = solve('a\*x^2+b\*x+c','a')

QuadraticFormula =

-(c + b\*x)/x^2

>> [x1 y1] = solve('5\*x-6\*y+3','-2\*x+9\*y+4')

x1 =

-17/11

y1 =

-26/33

>> DecimalValueX = double(x1)

DecimalValueX =

-1.5455

>> DecimalValueY = double(y1)

DecimalValueY =

-0.7879

>> OneHalf = '1/2'

OneHalf =

1/2

>> DecimalOneHalf = double(OneHalf)

DecimalOneHalf =

49 47 50

>> OneHalf

OneHalf =

1/2

>> OneHalf =sym('1/2')

OneHalf =

1/2

>> DecimalOneHalf = double(OneHalf)

DecimalOneHalf =

0.5000

>> %poly2sym sym2poly

>> Num1 = poly2sym([3 -2 5])

Num1 =

3\*x^2 - 2\*x + 5

>> Num2 = poly2sym([3 -2 5 4])

Num2 =

3\*x^3 - 2\*x^2 + 5\*x + 4

>> Num3 = sym2poly('-x^2+6\*x -12')

??? Undefined function or method

'sym2poly' for input arguments

of type 'char'.

>> syms x

>> Num3 = sym2poly(-x^2+6\*x -12)

Num3 =

-1 6 -12