

```
% Defining Symbolic Expressions
```

```
clc, clear
```

```
x = sym('x')
```

```
x = x
```

```
x+x+x
```

```
ans = 3 x
```

```
clc, clear
```

```
syms x k t
```

```
x + x + x + 2 * k + t ^ 2
```

```
ans = t^2 + 2 k + 3 x
```

```
x = t * k^2
```

```
x = k^2 t
```

```
clc, clear
```

```
syms x1 x2 a b c
```

```
x1 = (-b + (b^2 - 4*a*c)^(1/2))/(2*a)
```

```
x1 =
```

$$-\frac{b - \sqrt{b^2 - 4ac}}{2a}$$

```
x2 = (-b - (b^2 - 4*a*c)^(1/2))/(2*a)
```

```
x2 =
```

$$-\frac{b + \sqrt{b^2 - 4ac}}{2a}$$

```
x1 + x2
```

```
ans =
```

$$-\frac{b + \sqrt{b^2 - 4ac}}{2a} - \frac{b - \sqrt{b^2 - 4ac}}{2a}$$

```
syms y1 y2 x
```

```
y1 = (x+1)^2
```

```
y1 = (x + 1)^2
```

```
y2 = x^2 + 2*x + 1
```

$$y2 = x^2 + 2x + 1$$

```
if y1 == y2
    disp('ay')
else
    disp('bruh moment')
end
```

bruh moment

```
clc, clear
syms e m c
```

$$e = m \cdot c^2$$

$$e = c^2 m$$

```
solve(e, c)
```

ans =

$$\begin{pmatrix} 0 \\ 0 \end{pmatrix}$$

```
clc, clear
syms e m c
```

$$\text{eqn} = e == m \cdot c^2$$

$$\text{eqn} = e = c^2 m$$

```
solve(eqn, c)
```

ans =

$$\begin{pmatrix} \frac{\sqrt{e}}{\sqrt{m}} \\ -\frac{\sqrt{e}}{\sqrt{m}} \end{pmatrix}$$