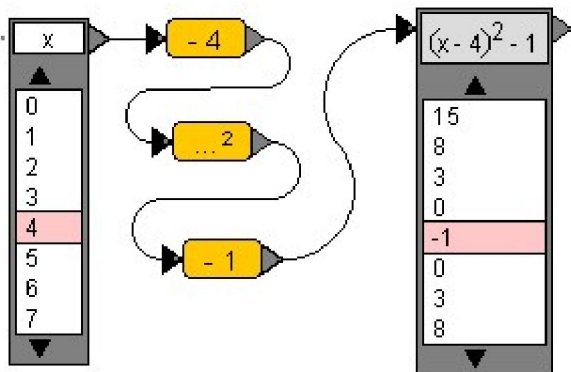


Parabeln

<http://www.matlet.ch/new/?cmd=dtlApplet&id=118&skel=applet&cmdBack=lstApplets&orderBy=title&seq=ASC&schoolYearFrom=&schoolYearTo=&thema=>

1 Zwei Nullstellen

Figure 1: zwei Nullstellen:
 $y = x^2 - 8x + 15$



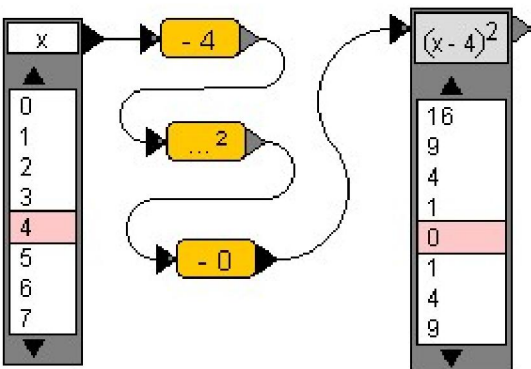
```
(%i13) x:makelist(i,i,0,7);
(%o13) [0,1,2,3,4,5,6,7]
```

```
(%i14) y:x**2-8*x+15;
(%o14) [15,8,3,0,-1,0,3,8]
```

```
(%i15) f(x):=x**2-8*x+15;
(%o15) f(x):=x^2-8x+15
```

2 Eine Nullstelle

Figure 2: nur eine Nullstelle:
 $y = x^2 - 8x + 16$

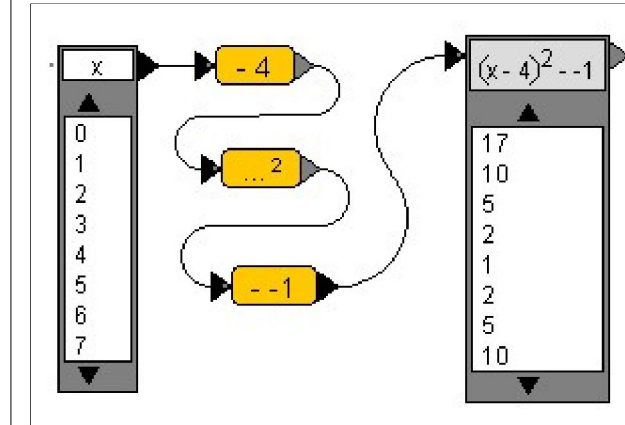


```
(%i16) y:x**2-8*x+16;
(%o16) [16,9,4,1,0,1,4,9]
```

```
(%i17) g(x):=x**2-8*x+16;
(%o17) g(x):=x2-8 x+16
```

3 Keine Nullstelle

Figure 3: keine Nullstelle:
 $y=x^2-8x+17$



```
(%i18) y:x**2-8*x+17;
(%o18) [17,10,5,2,1,2,5,10]
```

```
(%i19) h(x):=x**2-8*x+17;
(%o19) h(x):=x2-8 x+17
```

4 Grafik

```
(%i20) remvalue(x);
(%o20) [x]
```

```
(%i21) wxplot2d([f(x),g(x),h(x)], [x,0,7])$
```

```
(%t21)
```

