

[6.1] Simulate *poly* function of TI-85/86

The *poly* function of the TI-85 and TI-86 can be simulated with this function:

```
czeros(polyeval(list,x),x)→poly(list)
```

This defines a function *poly()* which returns the real or complex roots of a polynomial in x defined by the coefficients in the argument list. The coefficients are in order of descending degree. For example,

```
poly({1,-11,30})
```

solves for x in the polynomial $x^2 - 11x + 30 = 0$, and returns $\{5, 6\}$. Remember to include the zeros for powers with zero coefficients. For example, the list would be $\{4,0,-1,-2\}$ for the polynomial $4x^3 - x - 2$.

(credit to Ray Kremer)