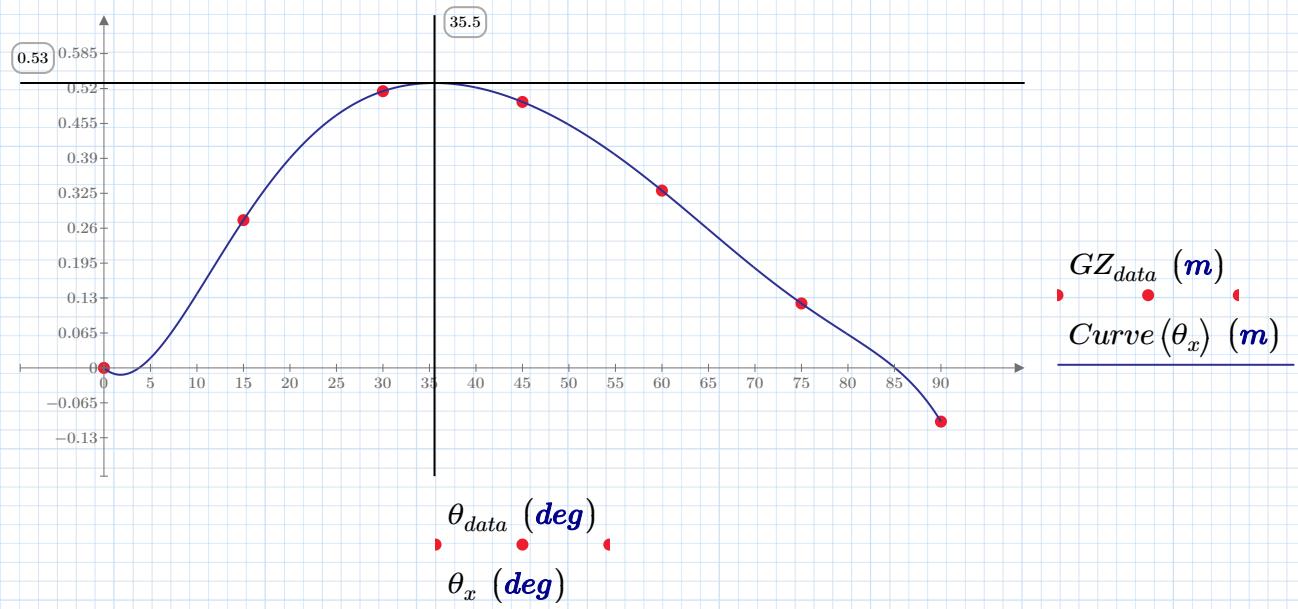


$$\theta_{data} := [0 \ 15 \ 30 \ 45 \ 60 \ 75 \ 90]^T \cdot deg$$

$$GZ_{data} := [0 \ 0.275 \ 0.515 \ 0.495 \ 0.33 \ 0.12 \ -0.1]^T \cdot m$$

$$\theta_x := 0 \ deg, 0.01 \ deg .. 90 \ deg$$

$$Curve := \text{polyfit}(\theta_{data}, GZ_{data}, 7)$$



I now need to evaluate the graph in two ways. One I need to find what the largest value on the y value is and then the point at which the curve crosses the x axis (for the second time).

...use the numerical Solve block:

Gleichungssystembedingungswerte

| |
|--|
| $\theta_x := 36 \ deg$ |
| $\frac{d}{d\theta_x} Curve(\theta_x) = 0$ |
| $\theta_{x_max} := \text{find}(\theta_x)$ |

$$\theta_{x_max} = 35.545^\circ$$

$$Curve_{max} := Curve(\theta_{x_max}) = 0.53 \text{ m}$$