$$\theta_{data} := \begin{bmatrix} 0 & 15 & 30 & 45 & 60 & 75 & 90 \end{bmatrix}^{\mathrm{T}} \cdot deg$$

$$GZ_{data} := \begin{bmatrix} 0 & 0.275 & 0.515 & 0.495 & 0.33 & 0.12 & -0.1 \end{bmatrix}^{\mathrm{T}} \cdot m$$

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

$$Curve := \mathrm{polyfit}\left(\theta_{data}, GZ_{data}, 7\right) \qquad w := 500 \ tonne \qquad d := 10 \ m \qquad \Delta := 10000 \ tonne$$

$$GG_1 := \frac{w \cdot d}{\Delta} = 0.5 \ m \qquad Curve_2\left(\theta_x\right) := GG_1 \cdot \cos\left(\theta_x\right)$$

Legend:
$GZ_{data} \ (m)$
$Curve\left(\theta_x\right) \ (m)$
$Curve_2\left(\theta_x\right) \ (m)$
$\theta_{data} \ (deg)$
$\theta_x \ (deg)$
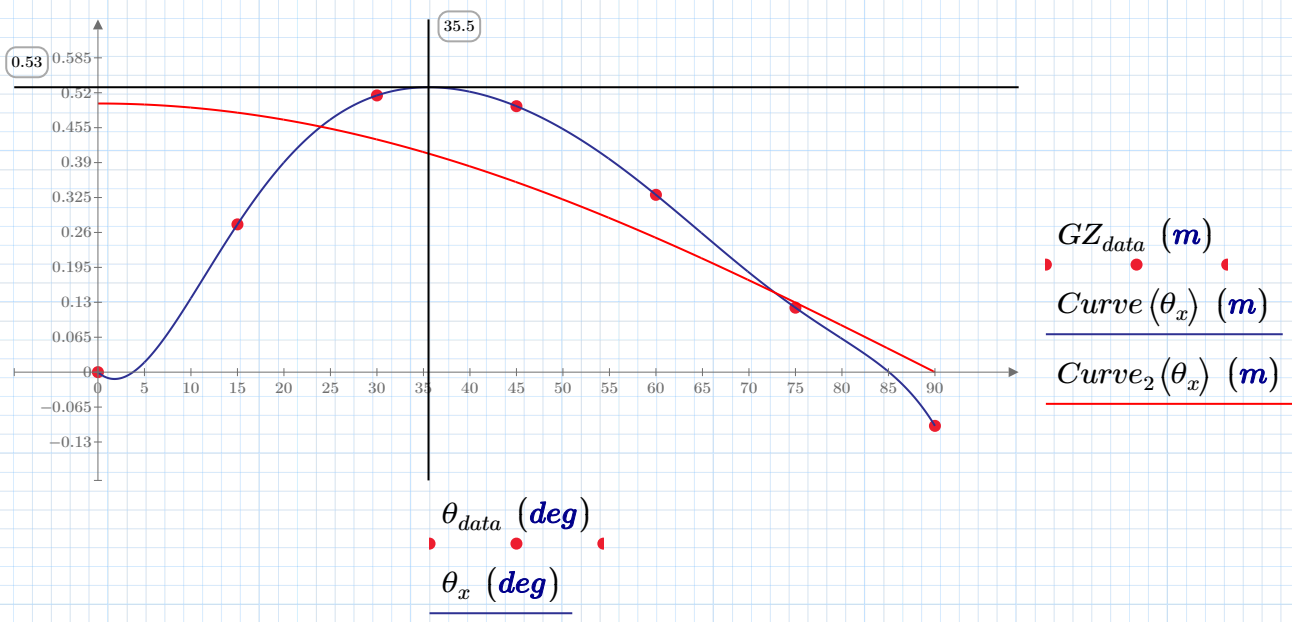
I now need to evaluate the graph in two ways. One I need to find what the largest value on the y value is and then the point at which the curve crosses the x axis (for the second time).

...use the numerical Solve block:

$$\theta_x := 35 \ deg$$

$$\frac{d}{d\theta_x} Curve\left(\theta_x\right) = 0$$

$$\theta_{x\_max} := \mathbf{find}\left(\theta_x\right)$$

$$\theta_{x\_max} = 35.545 \ ° \qquad \theta_{x\_max} = 0.62$$

$$Curve_{max} := Curve\left(\theta_{x\_max}\right) = 0.53 \ m$$