$$\text{data} := \begin{pmatrix} 2 & 0.13 \\ 3 & 0.185 \\ 4 & 0.235 \\ 5 & 0.28 \\ 6 & 0.32 \\ 7 & 0.355 \\ 8 & 0.38 \\ 10 & 0.42 \\ 12 & 0.445 \\ 14 & 0.46 \\ 16 & 0.47 \\ 18 & 0.48 \\ 20 & 0.482 \end{pmatrix}$$

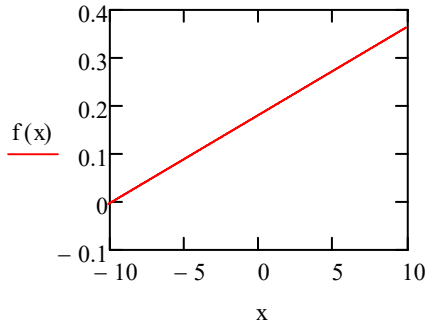
$$X := \text{data}^{\langle 0 \rangle}$$

$$Y := \text{data}^{\langle 1 \rangle}$$

$$\text{guess} := \begin{pmatrix} 0.185 \\ 0.28 \\ 0.42 \end{pmatrix}$$

$$\begin{pmatrix} E_0 \\ E_1 \\ E_2 \end{pmatrix} := \text{expfit}(X, Y, \text{guess}) = \begin{pmatrix} 1.097 \times 10^{5} \\ 1.677 \times 10^{-7} \\ -1.097 \times 10^{5} \end{pmatrix}$$

$$f(x) := E_0 \cdot e^{\left(E_1 \cdot x\right)} + E_2$$

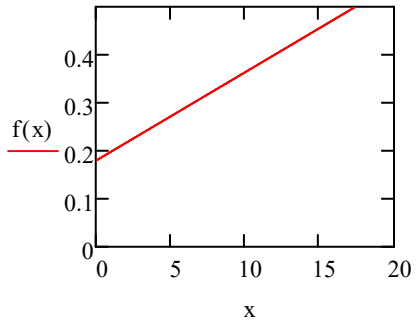


MathCAD parameters/coefficients:

$E := expfit(X, Y)$

$$\begin{pmatrix} E_0 \\ E_1 \\ E_2 \end{pmatrix} := E = \begin{pmatrix} 1.05 \times 10^{5} \\ 1.752 \times 10^{-7} \\ -1.05 \times 10^{5} \end{pmatrix}$$

$$f(x) := E_0 \cdot e^{E_1 \cdot x} + E_2$$



actual parameters/coefficients:

$$\begin{pmatrix} E_0 \\ E_1 \\ E_2 \end{pmatrix} := \begin{pmatrix} 0.4908835 \\ -0.5957742 \\ 0.2111335 \end{pmatrix}$$

$$f(x) := E_0 + E_1 \cdot e^{-E_2 \cdot x}$$