

Fundraising
Week 7 Thru
Calvin Lynch

$$\textcircled{1} - \textcircled{2} \Rightarrow 10^{-10} x_1 - x_1 = 1$$

$$x_1 = 1/(10^{-20} - 1)$$

$$= \frac{10^{10}}{-10^{10} + 1}$$

[illegible]

$$x_2 = 1 + \frac{10^{20}}{10^{20} - 1} = \frac{10^{20} - 1 + 10^{20}}{10^{20} - 1}$$

$$\bullet \frac{2 \times 10^{20} - 1}{10^{20} - 1}$$

[illegible]

This is caused by a round off error when dividing by a value near or machine epsilon.

looking at 1ci $x_1 = -1$, $x_2 = 2$ these approximations are significantly closer to the actual values. roundoff errors are avoided with perfect pivot vs. values that are significantly smaller in comparison to remaining entries.