

StoryWeaverGPT

Dataset, Tokenizer and Embedding

Group1

December 2, 2024



- 1 The Problem
- 2 Picturing the Solution
- 3 Some Algebra
- 4 The Formula



Dataset and Tokenizer

- Dataset: Reddit WritingPrompts Dataset
- Tokenizer: BPE Tokenizer



Choosing a quadratic equation

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“Oh, for @#%& sake!”



factor, factor, complete...

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$$0 = (x - 3/2)^2 - 13/4$$



Now let's solve it:

$$0 = (x - 3/2)^2 - 9/4 - 4/4 \implies (x - 3/2)^2 = 13/4$$



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$$\begin{aligned} 0 = (x - 3/2)^2 - 9/4 - 4/4 &\implies (x - 3/2)^2 = 13/4 \\ &\implies (x - 3/2) = \pm\sqrt{13/4} \end{aligned}$$



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Think this is enough to get the money?



Progress

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Not likely...



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$$x = 3/2 + \sqrt{13/4}, \text{ or}$$

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$$\text{and } x = 3/2 - \sqrt{13/4}, \text{ or}$$

$$x = -0.3027756377319946465596106337352479731256482869226231063552$$



Mathematical Proof

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Give them the Magic Formula,

$$ax^2 + bx + c = 0 \implies x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



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and tell them to try this first next time...

