Current Algebraic Constraints

What Forces Unique Solution?

With 4 Anchors Alone:

✓ 24 positions determined (indices where anchors appear)
✗ 73 positions undetermined
✗ 26^73 possible completions

The algebra cannot determine more without additional information.

Potential Additional Constraints

To achieve unique solution, need ONE of:

1. More anchor positions (cribs/known plaintext)
   • Each new anchor potentially determines its slot

2. Language constraints (if plaintext is English)
   • Dictionary words, bigram/trigram frequencies
   • Semantic coherence

3. Additional algebraic structure
   • Constraints on key material
   • Relationships between positions

4. The actual plaintext (ground truth)

Falsifiable Predictions

If this analysis is correct:

• Adding a 5th anchor at an unconstrained position would determine exactly 1 more position (25 total)

• The tail region (74-96) cannot be determined without information beyond the current 4 anchors

• Position 74 specifically must remain free under any algebraic analysis using only the 4 anchors

• No algebraic manipulation can extract more than 24 positions from these specific 4 anchors with L=17