February 6, 2021
Reflection 3
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Reflection on *Boolean Algebra as a Proof Paradigm.*

Two Reasons Lawrence Sher asserts that Boolean Lgebra is a perfect starting point for Mathematics

Lawrence Sher actually lists five benefits of boolean algebra but the most relevant to why it is a good starting point for students is likely:

- It provides practice in algebriac manipulation
- It touches on proofs that are complicated enough to encourage thinking about mathematics but not so complicated that they would be too difficult for a first year student

What I found interesting from Sher's article and do I think he did a good job at teaching other teachers how to deliver the subject to students?

I found Sher's article to be very easy to read through and that it conveyed its message efficiently. Despite being several pages, its message is clear and and is very informative for a short read. Not only were concepts explained in a way that frankly felt human but several helpful examples were provided to help re-enforce the information. Overall, I think he did an excellent job at delivering the information and gave a great model for how to tech it to students. Something I found interesting from his paper is how he presented his proofs and how easy they were to follow.

Proof that $A \cup [B \cup (A' \cap B')] = I$

Statements :	**Reason(s) :**
1. $A \cup [B \cup (A' \cap B')]$	**1. Given.**
2. $A \cup [(B \cup A') \cap (B \cup B')]$	**2. Distributive.**
3. $A \cup [(B \cup A') \cap I]$	**3. Inverse.**
4. $A \cup [(B \cap I) \cup (A' \cap I)]$	**4. Distributive.**
5. $A \cup [B \cup (A' \cap I)]$	**5. Identity.**
6. $A \cup [B \cup A']$	**6. Identity.**
7. $(A \cup A') \cup B$	**7. Associative.**
8. $I \cup B$	**8. Inverse.**
9. I	**9. Theorem:** $A \cup [B \cup (A' \cap B')] = I$