The Role of k Versus n in Mathematical Induction

References:

- 1. Dawkins, P. C., & Roh, K. H. (2020a). Assessing the influence of syntax, semantics, and pragmatics in student interpretation of multiply quantified statements in mathematics. International Journal of Research in Undergraduate Mathematics Education, 6(1), 1-22.
- 2. Dawkins, P. C., & Roh, K. H. (2020b). Coordinating two meanings of variables in proofs that apply definitions repeatedly. In Karunakaran, S. S., Reed, Z., & Higgins, A. (Eds), *Proceedings of the 23rd annual conference for Research in Undergraduate Mathematics Education*, (pp. 87-95). Boston, MA.
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We have introduced a new variable k in the statement of the PMI. Discuss with your group what the role of k is. Why do you think we use k instead of n?