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Baccaglini-Frank, Anna; Antonini, Samuele; Leung, Allen; Mariotti, Maria Alessandra

Designing non-constructability tasks in a dynamic geometry environment.

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Summary: This chapter highlights specific design features of tasks proposed in a Dynamic Geometry Environment (DGE) that can foster the production of indirect argumentations and proof by contradiction. We introduce the notion of open construction problem and describe the design of two types of problems, analysing their potential a priori, with the goal of elaborating on the potentials of designing problems in a DGE with respect to fostering processes of indirect argumentation. Specifically, we aim at showing how particular open construction problems, that we refer to as non-constructability problems, are expected to make indirect argumentations emerge.

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