EUCLIDEAN AND TRANSFORMATIONAL GEOMETRY

A Deductive Inquiry

Shlomo Libeskind

Euclidean and Transformational Geometry provides a complete and solid presentation of Euclidean geometry with an emphasis on how to solve challenging problems. The author examines various strategies and heuristics for approaching proofs and discusses the process students should follow to determine how to proceed from one step to the next, through numerous problem solving techniques. A large collection of problems, varying in level of difficulty, are integrated throughout the text, and suggested hints for the more challenging problems appear in the online Instructor's Solutions Manual for use at instructors' discretion.

KEY FEATURES:

- The text emphasizes strategies and heuristics of problem solving, discussing how students will know where to begin and how to proceed, which approach is more promising and why, and whether there are different possible solutions to a given problem.

- Provides an in-depth exploration of planar Euclidean geometry, with theorems and problems approached in various ways.

- Explores construction in three stages: (i) Investigation—where the discovery of how to construct the required figures is explored so that students can do new constructions on their own, (ii) Description of the construction steps and the actual construction, and (iii) Proof of the construction.

LOOK INSIDE
to learn more about the famous Treasure Island Problem!

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