

The Bigger The Better II

Group 8-29 *

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1 Introduction

This project aims to find an algorithm to determine the side length of the largest square that can be inscribed inside a convex n -gon. It is a continuation from a previous project completed in 2021, The Bigger The Better. [1]

1.1 Rationale

1.2 Research Questions

1. What is the side length of the largest square that can be inscribed in a triangle?
2. What is the side length of the largest square that can be inscribed in a regular n -gon, given $n \neq 4$?
3. What is the side length of the largest square that can be inscribed in a convex n -gon?

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1.3 Project Scope

References

H., W., & X. C., H. (2021). The bigger the better. <http://projectsday.hci.edu.sg/2021/05-Report/cat-08/8-02/index.pdf>