# The Bigger The Better II

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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

[1] H. Wu and X. C. Huo. "The Bigger The Better". In: (2021). URL: http://projectsday.hci.edu.sg/2021/05-Report/cat-08/8-02/index.pdf.