

# 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**

- [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>.