

Triangulation

Art Gallery Problem

- Lower & Upper Bounds

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Best/Simple Cases

 $\triangleright \Leftrightarrow$ For each n > 3, there exists an n-gon P with G(P) = 1



Computational Geometry, Tsinghua University

Upper Bound

❖ It suffices to

cover any polygon by

placing a guard at

each of its vertices

❖ This is intuitively true in the plane,

but NOT in higher dimensions

❖ For any polygon P, $G(P) \le |P| = n$

