

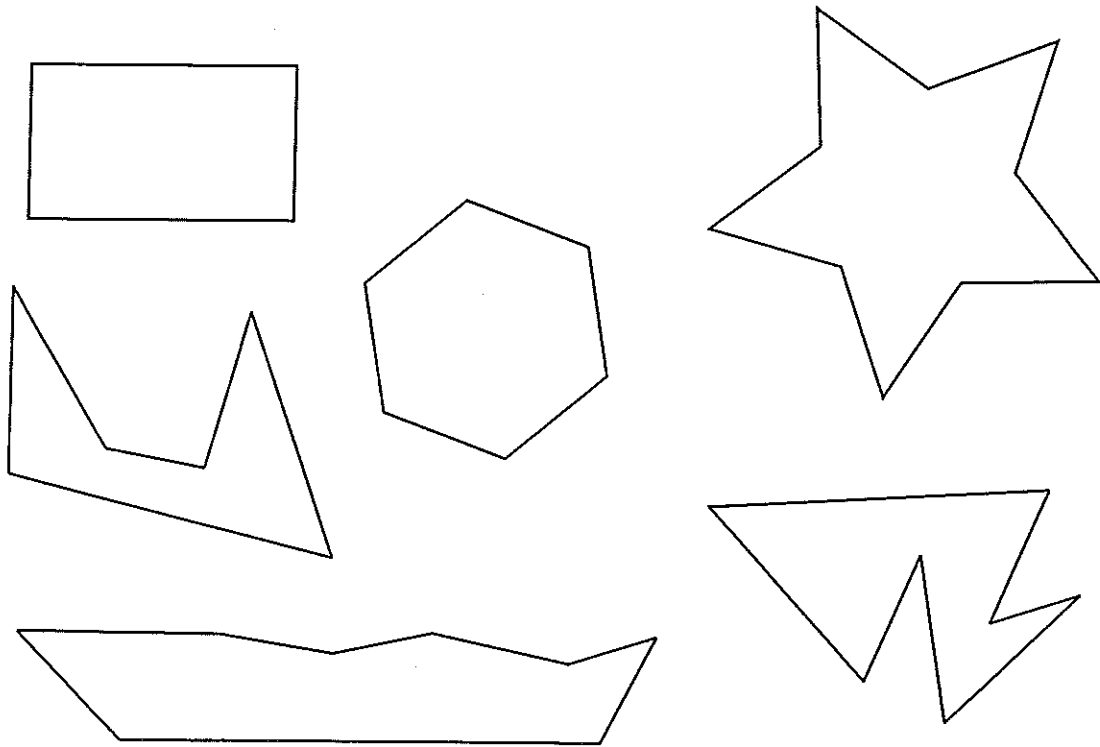
DEPARTMENT OF MATHEMATICS

MATHS 190

Lecture 11 - Some sample art galleries

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For the following floor plans for art galleries, put guards at the vertices so that every interior point is seen by at least one guard. Use as few guards as possible and count the number of guards needed.



Can you draw a gallery with 7 vertices that needs only 1 guard? 2 guards? 3 guards?

Can you draw a gallery with 9 vertices that needs only 1 guard? 2 guards? 3 guards?

Can you draw a gallery with 11 vertices that needs only 1 guard? 2 guards? 3 guards? 4 guards?