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# Kakutani's theorem (geometry)

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**Kakutani's theorem** is a result in geometry named after Shizuo Kakutani. It states that every convex body in 3-dimensional space has a circumscribed cube, i.e. a cube all of whose faces touch the body. The result was further generalized by Yamabe and Yujobô to higher dimensions, and by Floyd to other circumscribed parallelepipeds.

## References

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