



Fairer Dice



Benjamin Faure

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updated 11. 6. 2022 | published 11. 6. 2022

Summary

Have you ever been suspicious that the pips on your D6 have an effect on the fairness of your die, however tiny it is?...

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Have you ever been suspicious that the pips on your D6 have an effect on the fairness of your die, however tiny it is?

Worry no longer with the fairer die! The sum of all subtracted volume of this D6 is the same across all sides. This means that the volume of the pip for the 1 side is the same volume as the sum of all pip volumes on the 6 side. This ensures that the probability of the dice landing on any particular size isn't affected at all by the pips used to identify each side, as they are all equal in subtracted material.

Meshlab test results:

Control die: Center of Mass is 0.201298 0.121025 0.040078

Fairer die: Center of Mass is -0.001246 0.002691 0.000379

I've provided two versions. One die has a chamfer on all 12 edges, and the other has non chamfered edges.

Print Settings

Printer Brand:

Wanhao

Printer:

Wanhao Duplicator i3 Plus

Rafts:

Doesn't Matter

Supports:

No

Resolution:

0.08

Infill:

100%

Filament: CCTREE PLA White

Notes:

Print 100% solid to prevent uneven distribution of weight.

Category: Dice

Model files



ultrafair_4sideddie_chamfered_rounded1.stl



ultrafair_4sideddie_chamfered.stl



ultrafair_4sideddie_chamfered_rounded2.stl



ultrafair_4sideddie_nonchamfered.stl

[Find source .stl files on Thingiverse.com](#)

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