



Math Spectacle Show

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Akiyama's Math Spectacle Show has intrigued and inspired people in numerous countries around the world. Not only has he been spreading the intellectual side of mathematics and its usefulness to the general public, but his lectures also have a spirit of entertainment filled with humor and wit. The specific topics which will be delivered in the lecture are listed in the followings:

1. Create jigsaw puzzles from a regular tetrahedron.
2. Is this a rabbit or a duck?
3. A bird in a cage.
4. Spider changes to Geisha Girl.
5. It is a donkey or a dog? (Fig.3)
6. A big snake swallows a fox.
7. A pig does gymnastics on a horizontal bar.
8. Who is in the U.F.O?
9. Can two giant pandas live in the same house together? (Fig.1)
10. One type of atom fills space.
11. Why is a manhole cover round?
12. Can you drill a triangular hole?
13. Vehicles with strange wheels like bagels flattened along the edges.
14. How to pack cans efficiently?
15. Soap tells us is the minimum network connecting many cities.
16. A compact disk (CD) works well even if it is damaged.
17. Kidney stone will be cured without operation.
18. Volume and surface area of a sphere. (Fig.2)
19. Fortune-telling by Möbius bands.
20. Pythagorean Theorem and its applications.

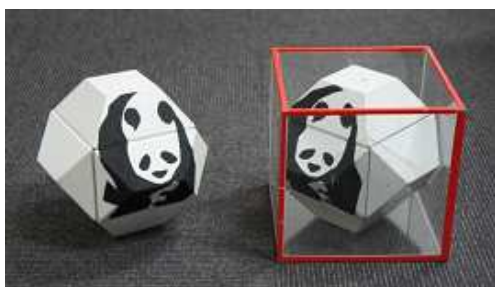


Fig. 1

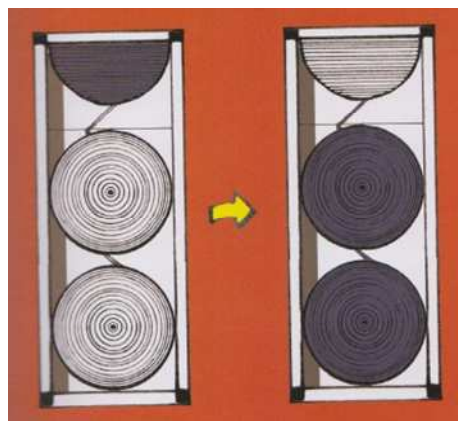


Fig.2



Fig.3

References

1. J. Akiyama, Tile-Makes and Semi-Tile-Makers, *Amer. Math. Monthly* **2007**, 114, 602-609
2. J. Akiyama and K. Matsunaga, Treks into Intuitive Geometry, *Springer* **2015**

Akiyama's Profile

Jin Akiyama is a mathematician at heart. Currently, he is a fellow of the European Academy of Science, the founding editor of the journal *Graphs and Combinatorics*, and the director of the Research Institute of Math Education at Tokyo University of Science. He is particularly interested in graph theory and discrete and solid geometry, and has published many papers in these fields. Aside from his research, he is best known for popularizing mathematics, first in Japan and then in other parts of the globe: his lecture series was broadcast on NHK television and radio from 1991 to 2013. He was a founding member of the Organizing Committee of the UNESCO-sponsored traveling exhibition "Experiencing Mathematics", which debuted in Denmark in 2004. In 2013, he built a hands-on mathematics museum called "Akiyama's Math Experience Plaza" in Tokyo. He has authored and co-authored more than 200 books, including *Factors and Factorizations of Graphs* (jointly with M. Kano, *Lect. Notes Math.*, Springer, 2011) and, *A Day's Adventure in Math Wonderland* (jointly with M. Ruiz, World Scientific, 2008), which has been translated into nine languages. He was recently awarded the book prize by Japan Math Society.

