Applied Mathematics

Examples

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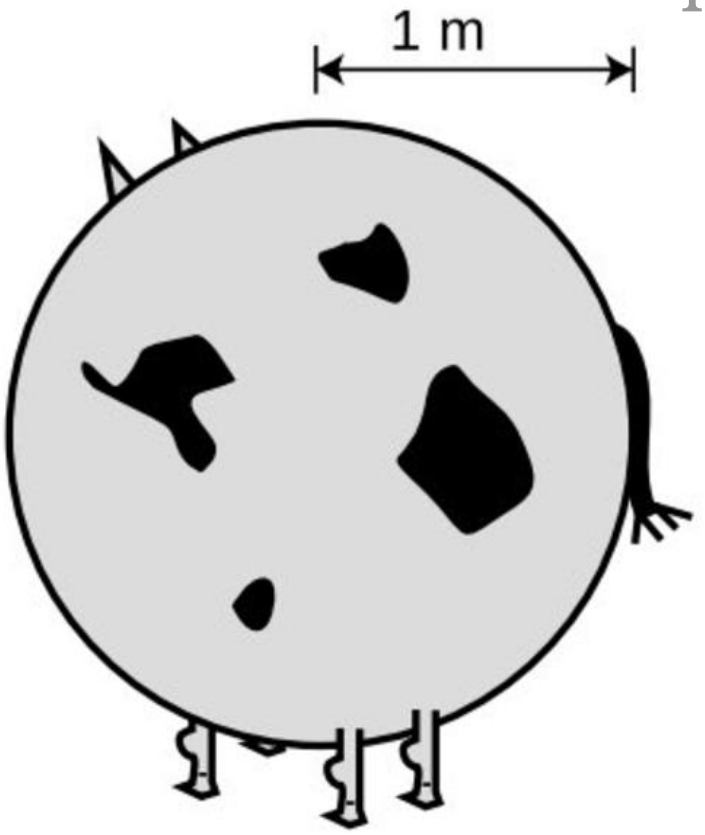

s / Consider a spherical cow.

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Introduction

The spherical cow [Lawrence-M-Krauss]

A physicist, an engineer, and a psychologist are called in as consultants to a dairy farm whose production has been below par. Each is given time to inspect the details of the operation before making a report.

> The size of the stalls for the cattle should be decreased. Efficiency could be improved if the cows were more closely packed, with a net allotment of 275 cubic feet per cow. Also, the diameter of the milking tubes should be increased by 4 percent to allow for a greater average flow rate during the milking periods.
>
> — The engineer

> The inside of the barn should be painted green. This is a more mellow color than brown and should help induce greater milk flow. Also, more trees should be planted in the fields to add diversity to the scenery for the cattle during grazing, to reduce boredom.
>
> — The psychologist

> Assume the cow is a sphere …
>
> — The physicist

Lawrence M. Krauss [1]

How quickly does a candle burn?

We could perform a number of experiments to find the solution to our question.

[1] You may read more from the reference [Lawrence-M-Krauss], *The Fear of Physics*.

References

- [Lawrence-M-Krauss] Lawrence M. Krauss. *Fear of Physics: A Guide for the Perplexed.* Basic Books. 2007. ISBN 9780465007134 books.google