

Bag o' Pebbles

History and provenance

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September 7, 2026

Two bags, urns, or piles

Gurmeet Manku's *Divide 100 Marbles into Two Piles*, dated September 16, 2008, gives a matching version with 50 red and 50 blue marbles and explicitly labels its source "Folklore" [1]. This is a useful, limited attribution: a documented version with no named inventor.

The objects are variously called marbles, balls, or pebbles, and the containers bags, urns, or piles. The same mathematical problem results when a container is chosen with probability one half and an object is then drawn uniformly from it.

Rules that matter

Both containers must be nonempty, and choosing the container is not weighted by its number of objects. Changing either rule changes or leaves undefined the problem.

The accompanying solution keeps those assumptions explicit and gives an optimality argument rather than only suggesting a favorable arrangement. No original author or earliest printed appearance was established beyond the documented folklore attribution.

Sources

[1] Gurmeet Manku, *Divide 100 Marbles into Two Piles* (September 16, 2008).

<https://gurmeet.net/puzzles/divide-100-marbles-into-two-piles/>

Sources checked September 7, 2026. A documented appearance is not necessarily the earliest appearance.