

Of Circles

Every Circle is equal to a Parallelogram whose length equal to half the Circumference and the Breadth equal to half the Diameter Therefore Multiply half the Circumference by half the Diameter and the product is the Area of the Circle
Problem. Having the Diameter of a circle to find the Circumference. As 7 is to 22 so is the Diameter to the Circumference

Of Spheres or Globes

A Sphere or globe is a Round solid Body every Part of whose surface is equally distant from a point within it called its center and it may be conceived to be formed by the Revolution of a semicircle round its diameter to find its solidity this is the Rule

1. Multiply the Axis or Diameter into the circumference the product is the superficial contents; which multiply by sixth part of the Axis the product is the Solidity
2. Or thus As 21 is to 11 so is the cube of the Axis to the Solidity
3. Or thus 1 is to 52.39 so is the cube of the Axis to the Solidity

Of Arithmetical Progression

A Gentleman who had a daughter married on new year's day gave the husband towards her portion 4 Shillings promising to triple the sum the first day of every month for nine months after the marriage the sum paid on the first day of the ninth month was 292 Shillings required the lady's portion

$\begin{array}{r} 1 \\ 3-1 \\ 12-2 \\ 36-3 \\ 108-4 \\ 324-5 \\ 972-6 \\ 2916-7 \\ 8748-8 \\ 26244-9 \end{array}$	Ratio $\frac{3}{2}$	$\begin{array}{r} 0729-0 \\ 26244-9 \\ \hline 70732 \\ 2 \sqrt{70720} \\ 2 \sqrt{39364} \\ \hline 19600 \end{array}$
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Ans 1960 £. s. d.