

*In memory of Justynka, my wife*

# FORMULAS

FORMULA No.

**D171**

'The laws of nature are but the mathematical thoughts of God.'  
Euclid



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We are not mathematicians, but we love mathematics and create formulas ourselves.

**'No other science boosts the faith in the strength of the human spirit like mathematics.'**  
Hugo Steinhaus

$k \in \mathbb{N}$

$$\sum_{k=1}^{k=\infty} \frac{72 \times k \times p_k^2 \times p_{k+1}^2 + [9 \times (4 \times k^2 + 1) - 1] \times (p_{k+1}^2 - p_k^2) - 36 \times k \times (p_k^2 + p_{k+1}^2)}{[9 \times (2 \times k - 1)^2 - 1] \times [9 \times (2 \times k + 1)^2 - 1] \times (p_k^2 - 1) \times (p_{k+1}^2 - 1)} = \frac{1}{6}$$

$p_k$  ( $k$ -th prime number)

**NEW MATHEMATICAL FORMULA DAILY**