In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

W15

www.and-just-math.com

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

1 WEEK = 7 DAYS = 7 FORMULAS

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D151

www.and-just-math.com
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

$$k \in N$$

$$\prod_{k=1}^{k=\infty}\left[1-\frac{9\times\left({p_{k+1}}^{3}-{p_k}^{3}\right)}{\left(8\times{p_k}^{3}+17\right)\times\left({p_{k+1}}^{3}+1\right)}\right]=\frac{8}{9}$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D152

www.and-just-math.com
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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{\left(p_{k+2}{}^2+1\right)\times p_{k+1}{}^4-\left(p_{k+1}{}^2+1\right)\times p_k{}^2\times p_{k+2}{}^2}{p_k{}^2\times p_{k+1}{}^2\times\left(p_{k+1}{}^2+1\right)\times\left(p_{k+2}{}^2+1\right)}=\frac{9}{40}$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D153

www.and-just-math.com
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

$$k \in N$$

$$\prod_{k=1}^{k=\infty} \frac{(k+1)^{p_k} \times \left[(k+2)^{p_{k+1}} + 2 \times {p_{k+1}}^{k+1}\right]}{(k+2)^{p_{k+1}} \times \left[(k+1)^{p_k} + 2 \times {p_k}^{k}\right]} = \frac{1}{2}$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D154

www.and-just-math.com
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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} k \times \left({p_k}^{\frac{1}{p_k}} - 2 \times {p_{k+1}}^{\frac{1}{p_{k+1}}} + {p_{k+2}}^{\frac{1}{p_{k+2}}} \right) = \sqrt{2} - 1$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D155

www.and-just-math.com
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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{(k+1)^2 \times ({p_k}^2+1) \times {p_{k+1}}^2 - k^2 \times {p_k}^2}{k^2 \times (k+1)^2 \times {p_k}^2 \times {p_{k+1}}^2} = \frac{2 \times \pi^2 + 3}{12}$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D156

www.and-just-math.com
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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{(p_{k+2} + k - 1) \times [10 \times p_{k+3} - 11 \times p_{k+2} + p_{k+1} + 9]}{(p_{k+2} - p_{k+1} + 1) \times (p_{k+3} - p_{k+2} + 1) \times 10^k} = 1\frac{7}{9}$$

p_k (k-th prime number)

NEW MATHEMATICAL FORMULA DAILY

In memory of Justynka, my wife

FORMULAS

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

FORMULA No.

D157

www.and-just-math.com
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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{(2 \times k + 1)^2 \times ({p_k}^2 + 1) \times {p_{k+1}}^2 - (2 \times k - 1)^2 \times {p_k}^2}{(4 \times k^2 - 1)^2 \times {p_k}^2 \times {p_{k+1}}^2} = \frac{\pi^2 + 2}{8}$$

p_k *(k-th prime number)*

NEW MATHEMATICAL FORMULA DAILY

We invite you every week and every day to our website www.and-just-math.com

Thanks for:
Photo nonbirinonko z Pixabay
Photo Gordon Johnson z Pixabay
Photo lange-adrian z Pixabay