

# **FORMULAS**

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

FORMULA No.

**W28** 

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



## **FORMULAS**

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

FORMULA No.

**D281** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{4 \times k^4 + 24 \times k^3 + 69 \times k^2 + 71 \times k + 16}{(k+3) \times (k+4) \times (4 \times k^2 - 1)^2} = \frac{\pi^2}{8}$$



## **FORMULAS**

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

FORMULA No.

**D282** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{16 \times k^4 + 112 \times k^3 + 383 \times k^2 + 569 \times k + 240}{(k+3) \times (k+4) \times (16 \times k^2 - 1) \times [16 \times (k+1)^2 - 1]} = \frac{4 - \pi}{8}$$



## **FORMULAS**

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

Euclid

FORMULA No.

**D283** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{4 \times k^4 + 40 \times k^3 + 189 \times k^2 + 460 \times k + 441}{(k+2)^2 \times (k+3)^2 \times (2 \times k + 5) \times (2 \times k + 7)} = \frac{2 \times \pi^2 - 15}{12}$$



## **FORMULAS**

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

FORMULA No.

**D284** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{k^6 + 6 \times k^5 + 13 \times k^4 + 28 \times k^3 + 52 \times k^2 + 48 \times k + 16}{k^2 \times (k+1)^4 \times (k+2)^2} = \frac{\pi^2}{6}$$



### **FORMULAS**

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

Euclid

FORMULA No.

**D285** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{25 \times k^5 + 145 \times k^4 + 334 \times k^3 + 548 \times k^2 + 712 \times k + 256}{(5 \times k - 3) \times (5 \times k + 2) \times (k + 2)^3 \times (k + 3)^3 \times (k + 4)^3} = \frac{533 - 54 \times \pi^2}{54}$$



## **FORMULAS**

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

FORMULA No.

**D286** 

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

$$k \in N$$

$$\sum_{k=1}^{k=\infty} \frac{16 \times k^4 + 224 \times k^3 + 1043 \times k^2 + 1069 \times k + 192}{(k+7) \times (k+8) \times (16 \times k^2 - 9) \times (16 \times k^2 - 1)} = \frac{\pi}{8}$$



## **FORMULAS**

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

FORMULA No.

**D287** 

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

$$\sum_{k=1}^{k=\infty} \frac{1}{4 \times (2 \times k - 1)^2 - 1681} = \frac{\pi}{328}$$

