

# Math Jeopardy

Calculus

Definitions

History

Discrete

Puzzles

100

100

100

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200

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300

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400

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400

500

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500

# Calculus 100

Compute:  $\frac{d^2}{dx^2}(x^2 \cos(x))$

Answer

► Game Board

# Calculus 200

What is Rolle's Theorem?

Answer

► Game Board

# Calculus 300

Compute  $\int \int \int x + 6 \, dx^3$

Answer

► Game Board

# Calculus 400

Compute:  $\frac{d}{dx}(2^x)$

Answer

► Game Board

## Calculus 500

Compute:  $\int \frac{1}{x^2\sqrt{x^2-4}}dx$

Answer

► Game Board

## Definitions 100

Give an equation containing two variables that is not a function:

Answer

► Game Board

## Definitions 200

What does it mean for a function to be even?

Answer

► Game Board



## Definitions 300

What is a DiHedral group?

Answer

► Game Board

## Definitions 400

In the equation  $8 - 3 = 5$  what is the minuend?

Answer

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## Definitions 500

State the Fundamental Theorem of Calculus:

Answer

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# History 100

Who invented Calculus?

Answer

► Game Board

# History 200

What base was the Mayan number system?

Answer

► Game Board

# History 300

$\sqrt{2}$  is known as this mathematician's constant:

Answer

► Game Board

## History 400

This famous mathematician introduced the notion that some infinities are bigger than others.

[Answer](#)[► Game Board](#)

## History 500

Who was the first person to use  $f(x)$  notation?

Answer

► Game Board



## Discrete 100

What is the definition of odd?

Answer

► Game Board

State the Well-Ordering Principle

Answer

► Game Board

## Discrete 300

A drawer contains 6 pairs of black socks, 5 pairs of white socks, 5 pairs of red socks, and 4 pairs of green socks. How many single socks do we have to take out to make sure that we take out two socks with different colors?

Answer

► Game Board

What does it mean for a function  $f : \mathbb{R} \rightarrow \mathbb{R}$  to be a surjection?

Answer

► Game Board

## Discrete 500

Let  $M = \{m : m \text{ is a math major}\}$ ,  $P = \{p : p \text{ is in this room}\}$ ,  
 $F = \{f : f \text{ is having fun}\}$ . Convert the following formal  
notation to words without the use of variables:  
 $\forall x \in M, \text{if } x \in P \text{ then } x \in F$

Answer

► Game Board

## Puzzles 100

What is  $\pi + e$ ?

Answer

► Game Board

## Puzzles 200

Using only addition, how can you make eight 8's into 1000?

Answer

► Game Board

## Puzzles 300

What is the difference between a new penny and an old quarter?

Answer

► Game Board



## Puzzles 400

There is a chain nailed to a wall. The chain is 10 feet long and the center of the chain dips down 5 feet from where each side of the chain is nailed to the wall. How far are the 2 ends of the chain from each other?

[Answer](#)[► Game Board](#)

## Puzzles 500

You have three bag. Bag A contains two black marbles, bag B contains two white marbles, and bag C contains one black and one white marble. You choose a bag and pull out a white marble. What is the probability that the second marble in the bag is white?

[Answer](#)[► Game Board](#)