

FERMI

Montgomery Science Olympiad

Score: ___/100

50 Minutes

Scoring Rule: 5 points if exact digit; 3 points if one digit off; 1 point if two digits off

What is the mass in kg of all the salt in the Earth's oceans?

19

How many cows currently exist?

9

How long in seconds will Usain bolt take at his peak speed to reach the surface of the moon from the surface of the earth?

7

What is 2^{39} ?

11

Approximately how many commercial airplanes are in the sky over the US right now?

4

What is the probability of one of those planes crashing?

-7

The probability of dying in an aviation incident?

-2

How many gallons of water will have poured from Niagara falls in one hour?

9

Based on the water content of humans, how many people would it take to equal the amount of water poured in that time?

8

Ratio between US GDP and Monaco's GDP?

3

How rapidly does human hair grow in miles per hour?

-8

On average, how many 911 calls are made in the US per year?

8

How many human cells are there in the United States?

19

How many centuries ago was the first chair invented?

1

How many on-demand audio streams did Post Malone's sophomore album, beerbongs & bentleys, receive on its first week?

8

Within the last second, how much money did Google just make?

3

How many people log in to play fortnite every month?

7

In comparison, in 2018, how many people logged in to play Minecraft every month?

8

If I were to stack Blu Ray discs on top of one another, how many would I need to equal the height of the Burj Khalifa?

6

On a scale from 1-10, how difficult is this exam?

(accept 0 and 1)