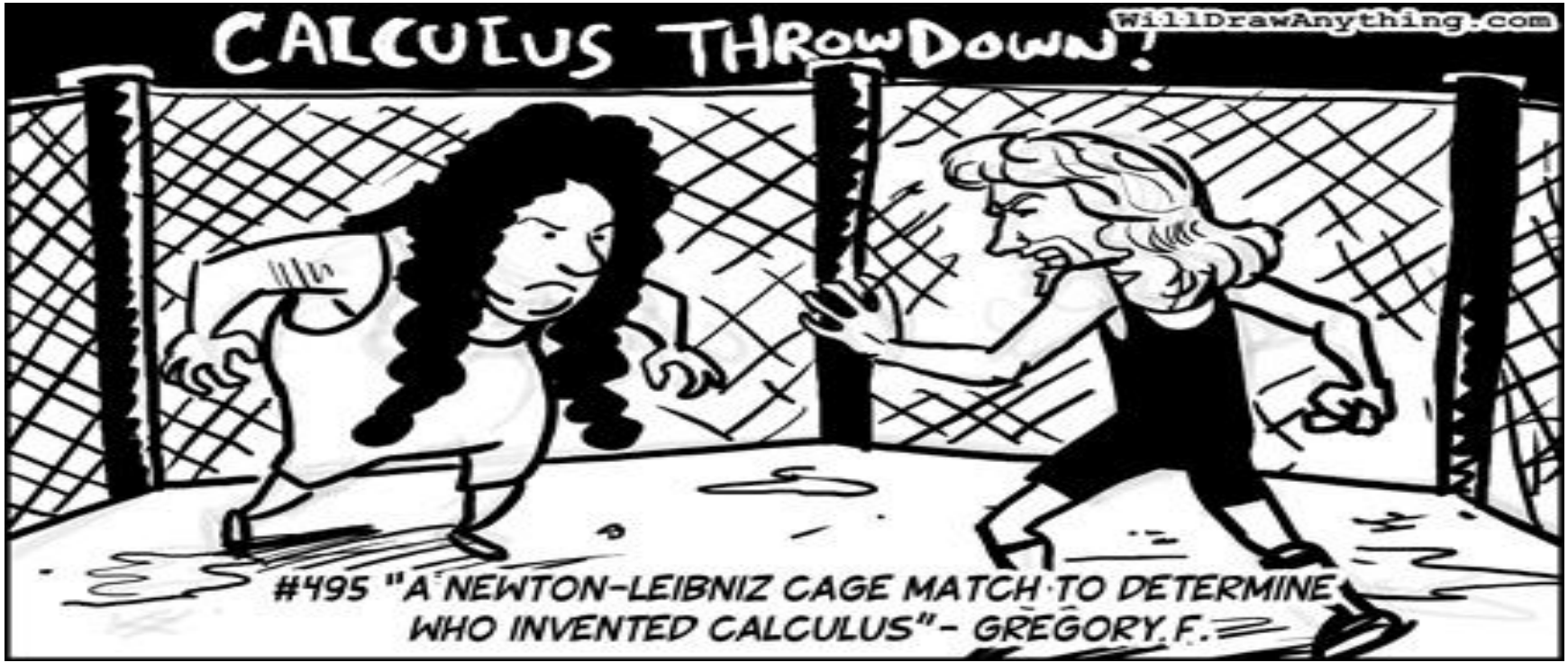
1.The Idea of Calculus was developed by Sir Isaac Newton and Gottfried Leibniz in the late 1600

2. Both had developed the idea individually



Definition of Calculus:

1. **Part of analysis**
2. **Finds out the instantaneous rate of change in something**
3. **Different ways of getting the slope of a graph at one specific point of graph.**

What is derivative and derivative notation?

⇨ Derivatives are the result of performing a differentiation process upon a function or an expression. Derivative notation is the way we express derivatives mathematically. This is in contrast to natural language where we can simply say "the derivative of...".

Lagrange's notation: f'

Leibniz's notation: dy/dx

Newton's notation: $\dot{y}$

$y=\cos(x)$

How can we express the derivative of $\cos(x)$?

1. *Cos'*
2. *dy/dx*
3. *d cos/dy*
4. *d/dx cos(x)*

Answer:

2 and 4 is the correct answer.

Explanation

1.Cos′ isn't correct. We don't apply the "prime" mark on mathematical operators. Only on function or variable letters.

2.dy/dx is the correct way of expressing the derivative of y with respect to x in Leibniz's notation.

3. d cos/dx isn't the correct way of using Leibniz's notation. What we differentiate with respect to x should be an expression or a function. Cos is simply a mathematical operator, like square root of, end square root or %percent.

4. d/dx cos(x) is the correct way of expressing the derivative of cos(*x* in Leibniz's notation.