

# Leibniz

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## HE INVENTED!!!!

- ♦ PUBLISHED NEW METHOD FOR THE GREATEST AND THE LEAST
- ♦ HIS METHODS WERE ADOPTED UNIVERSALLY
- ♦ HE WAS THE FIRST TO USE THE TERMS COORDINATES, FUNCTION, AND VARIABLE
- ♦ 1674 INVENTED DIFFERENTIAL AND INTERGRAL CALCULUS
- ♦ IN 1675 HE DISCOVERED FUNDAMENTAL PRINCIPLES OF INFINITESIMAL CALCULUS

## CONT...

- ♦ BEFORE PUBLISHING HIS WORK HE SENT LETTERS TO NEWTON OUTLINING HIS METHODS
- ♦ WORKED WITH ANALYSES WITH VARIABLES X AND Y RANGING OVER INFINITY (USED FREQUENTLY)
- ♦ THE PRODUCT RULE OF DIFFERENTIAL CALCULUS IS STILL CALLED LEIBNIZ'S LAW
- ♦ AFTER THE DEATH OF LEIBNIZ THEY RECREDITTED HIM WITH THE INVENTION OF CALCULUS
- ♦ HE INVENTED A CALCULUATOR

#### WHY NOT NEWTON?

- ♦ HE STUDIED THE WORK OF OTHER SCIENTISTS AND MATHEMATICIANS WHICH ALLOWED HIM TO ARRIVE AT HIS CALCULUS SYSTEM
- ♦ WHEN THE BRITISH FOLLOWED NEWTON'S SYSTEM THEY MADE NO MATHEMATICAL ADVANCES
- ♦ HE STUDIED UNDER BARROW WHERE HE COULD HAVE COPIED HIS WORK AND CLAIMED IT AS HIS OWN
- ♦ HE HAD A WIDE VARIETY OF STUDIES AND MATHEMATICS WAS NOT HIS ENTIRE FOCUS
- ♦ WAS NOT THE FIRST TO PUBLISH HIS WORK WITH CALCULUS

#### CONT...

- ♦ NEWTON NEEDED DESCARTES' WORK TO ESTABLISH HIS SYSTEM OF CALCULUS
- ♦ NO PROOF THAT NEWTON CAME UP WITH HIS SYSTEM OF CALCULUS BEFORE LEIBNIZ
- ♦ HIS SYSTEM WAS NOT AS COMPLETE AS THAT OF LEIBNIZ
- ♦ AFTER LEIBNIZ'S DEATH IT BECAME KNOWN THAT ACCUSATION MADE AGAINST LEIBNIZ BY NEWTON WERE FALSE
- ♦ NEWTON ONLY DISCOVERED CALCULUS LIKE HE DISCOVERED GRAVITY. CALCULUS WAS NOT INVENTED ONLY DISCOVERED.

#### TIMELINE

- ♦ 1671- INVENTED A CALCULATING MACHINE
- ♦ 1675 DEVELOPED FOUNDATION OF CALCULUS
- ♦ 1676 PUBLISHED WORK ON CALCULUS
- ♦ 1676 NEW METHOD FOR THE GREATEST AND THE LEAST
- ♦ 1711 DISPUTE BETWEEN NEWTON AND LEIBNIZ WAS AT FULL FORCE

# CONCLUSION

Leibniz published his work 9 years before Newton. This means that Leibniz should be credited with the invention of Calculus because he showed proof of his work 9 years before Newton. Newton could have easily copied Leibniz's work and claimed it as his own. This is why Leibniz is the true inventor of Calculus.

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