- Zeno (490-425 BCE) Eleatic philosopher who believed all change is an illusion and introduced a book containing 40 paradoxes of motion that appeared to reinforce his claims
- Eudoxus(408-305 BCE) devised the method of exhaustion where one would inscribe a polygon inside a circle and continuously increase the number of sides to get a closer and closer approximation to the actual area of the circle
- Euclid(325-265 BCE) proved in 300 BCE that there are an infinite number of primes but due to taboo, refused to use the idea of the actual infinite and claimed that no matter how many primes you find there will always be more
- Archimedes(287-212 BCE)-used a primitive form of integration by assigning an arbitrarily large number of triangles under a curve to find areas and volumes
- Galileo(1564-1642 CE) worked on problems with concentric circles of different radii and concluded they consisted of the same number of points; also began one to one mapping of natural numbers with their subsets





Newton(1643-1727 CE) – further develops previous ideas on calculus but sidesteps the controversial infinity by using obscure notion of "fluxion"

Leibniz(1646-1716 CE) – works with infinitely small for his method on calculus

- Cavalieri(1598-1647 CE)-theory of indivisibles which claims that lines are made up of infinitely many points and areas consist of infinitely many lines
- Roberval(1602-1675 CE) took Cavalieri's theory of indivisibles and initiated an approach that would allow him to compare and thus discard indivisibles which possessed no magnitude or size
- Bolzano(1781-1848 CE) wrote *Paradoxes of the Infinite* and was the first to define the concept of the set as a totality
- Cantor(1845-1918 CE) laid foundation for modern set theory by claiming there were many different classes of infinity and invented an arithmetic method for those classes



Timeline Bibliography

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