

# Measure/Shape

(77,000 BC - 600 AD)

+600

"0, 1, 2, 3, 4,  
5, 6, 7, 8, 9"  
"Hindu Numerals"

+400

"**Arithmetica**"  
Diophantus

+200



"**Almagest**"  
Ptolemy

0

Trig-Tables  
Hipparchus

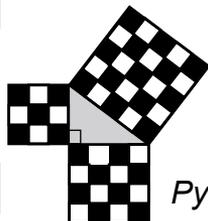
-200



$$= \pi \cdot r^2$$

Geometry Theory  
Euclid, Archimedes

-400



Shape  
Theory  
Thales  
Pythagoras

-600

-2,000



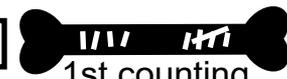
Egypt/Sumer Math

-3,000



Egypt/Sumer Count

-35,000



1st counting

-77,000



geometric design

# Math-Language

(600-1600 AD)

logarithms Napier

1600

$$[ax^4 +] bx^3 + cx^2 + dx + e = 0$$

[Tartaglia], Ferrari

1500



Euclid's  
"Elements"  
printed

1400

$$\sin/\pi = \sum$$

power series  
Madhava

1300



"Liber Abaci"  
Fibonacci

1200

$$\sqrt{x^2} = \pm x$$

roots  
Bhāskara II

1100

1000

$$x^m \cdot x^n = x^{(m+n)}$$

exponents  
Al-Karaji

900

$$ax^2 + bx + c = 0$$

Algebra (Al-Jabr)  
Al-Khwarizmi

800

700

0, ∞

$$\sin/\cos = \sum$$

0, roots, trig, series  
Brahmagupta, Bhāskara

600

# Modern Math

(1600-today)

$$I = \log_2(\text{probability})$$

Information Theory  
Shannon

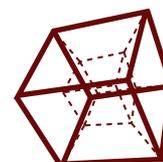
1900

$$\infty_{\text{decimal}} > \infty_{\text{rational}}$$

Chaos, Set Theory, Stat  
Poincaré, Cantor, Pearson



Boolean  
Algebra

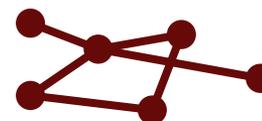


Groups, N-D Geometry  
Galois, Riemann, Bolyai

1800

$$p(H|D) = \frac{p(H)p(D|H)}{p(D)}$$

Bayes Theorem

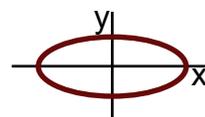


Graph Theory,  $e^{i\pi} = -1$   
Euler

1700

Calculus, Linear Algebra  
Newton, Leibniz, Takakazu

Probability Theory  
Pascal, Fermat



$$x^2/a^2 + y^2/b^2 = 1$$

Analytic Geometry  
Descartes

1600