Twitter Thread by RapperPandit ■■ ■■■■■■4■■■■■■

RapperPandit ■■ ■■■■■■4■■■■■■
@RapperPandit

***BIGGEST EXPOSE Of LOST INDIAN HISTORY WITH SHOCKING EVIDENCES-presented by @i4kashmir**
Oh Bharata ! It was Hidden from you for AGES !!

- How Did Europe from Dark Ages come to Renaissance?
-1188 Years ago, who was this Genius Rishi who Did Clossal Works Surpassing Issac Newton?

2/n: At a mere 23 years of Age, this Genuis Rishi created the most colossal ever treatise in Mathematics, 1188 Years before Issac Newton. He Name: Aryabhata (■■■■■■)
lets read slowly many FASCINATING Findings (Even if you dont hav Math Background !). You will ENJOY the Magic!

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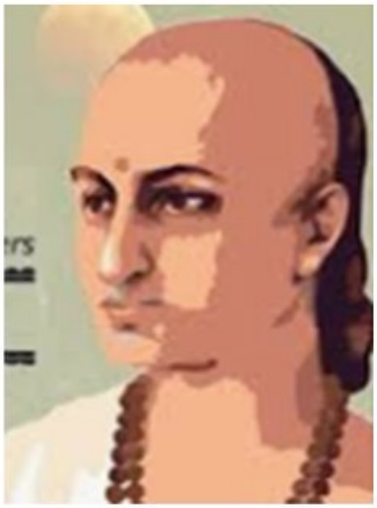
1188 YEARS before Sir ISSAC NEWTON



At the Age of mere 23 years this genius Rishi Aryabhata compiled Colossal work of

ARYABHATIYA

Bigger and Original than

Philosophiæ Naturalis Principia Mathematica of ISSAC NEWTON

SOME CONTRIBUTIONS

-PLACE VALUE USING ZERO
-ALGEBRA
-ARITHMETIC
-TRIGNOMETRY & **SINE TABLES**
-CALCULUS
-POWER SERIES & -CONTINUOUS FRACTIONS
-DAYS OF YEAR & E**ARTH IS ROUND**
-AREA OF TRIANGLE
-QUADRATIC EQUATIONS
-PLANETARY MOTION, PLANES & **ECLIPSES**
-H**ELIOCENTRISM** & REVOLUTION OF EARTH
-CIRCUMFERENCE OF EARTH & ITS ROTATION

3/n We all have seen the Use of Bow/Arrow to fight. But the Brilliant ■■■-■■■■■■ used it for maths. The basis of Trignometry.
Sin & Cosine Tables. (Remember School Days).

A Shloka represents modern day Differential Equation
See the Illustration below. See the Brilliance !!

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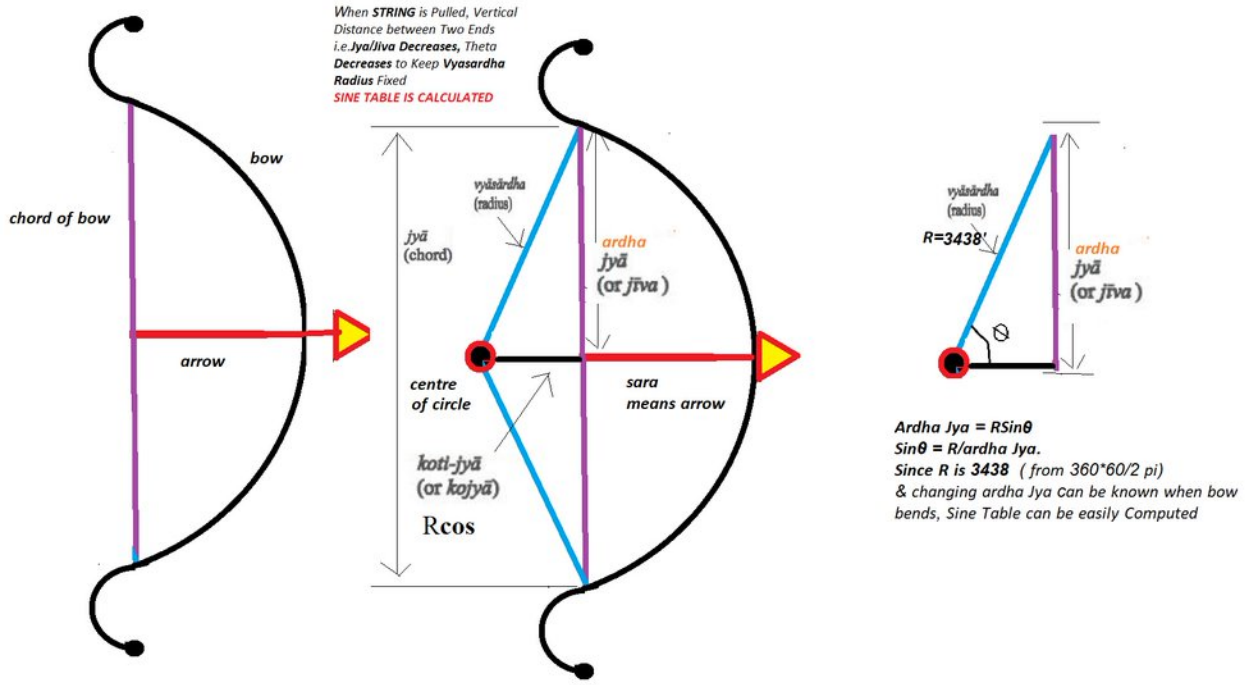
SINE TABLE COMPUTED FROM THE WORKING OF BOW BY ARYABHATA



Āryabhaṭa gives the following rule for deriving the successive sine-differences. It corresponds to the well-known differential formula

$$\frac{d^2\ (\text{Sin}\ x)}{dx^2} = -\text{Sin}\ x$$

प्रथमाच्चापज्यार्धाद्यैरूनं खण्डितं द्वितीयार्धं ।
तत्प्रथमज्यार्धांशैस्तैस्तैरूनानि शेषाणि ॥ *

The term 'Sine' is equivalent to the modern sine multiplied by the radius 3438. According to the rule, each sine-difference diminished by the quotients of all the previous differences and itself by the first difference (*viz.*, 225),

4/n In Rishis (■■■) of ancient India were accomplished Mathematicians and Scientists with a spiritual touch. The MASTERS !!
Another Equation represents Value of pi (∏), the Atma of Geometry.

VALUE OF PI (∏)

चतुरधिकं शतगष्टगुणं द्वाषष्टिस्तथा सहस्त्राणाम्।
अयुतद्वयविष्कम्भस्यासन्नो वृत्तपरिणाहः ॥

Means a Circle with Diameter 20,000 will have Circumference 62,832

$$\Pi = \frac{62,832}{20,000} = 3.1416$$

diff Eqn & Sine Table

Āryabhaṭa gives the following rule for deriving the successive sine-differences. It corresponds to the well-known differential formula

$$\frac{d^2\ (\text{Sin}\ x)}{dx^2} = -\text{Sin}\ x$$

प्रथमाच्चापज्यार्धाद्यैरूनं खण्डितं द्वितीयार्धं ।
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5/n Buth What did Aryabhata do with It? Of what use?
He created Magic. The Values of-
-Earth's Diameter
-Value of pi (∏)
-Days in a year.
-Sin Table
All CORRECT!!

They have Profound implications, in Navigation, Mathematics, Physics, Calender, Astronomy & Everthing we Do!

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CALCULATIONS	UOM	ARYABHATA आर्यभट	MODERN MATHEMATICS
EARTH-Circumference	Miles	**24,835**	**24,901**
Days in Year	Days	**365.3586**	**365.25**
Value of pi (∏)	Ratio	**3.1416**	**3.1415926...**
Rsin(45degree) (R=3438)	Value	**2431**	**2431.0331**

Aryabhatta used value of R=3438.

Jya (Jiva) refers ardha-Jya (Jiva) *(adrha dropped)*

Ardha Jya = RSinθ
Sinθ = R/ardha Jya.
*Since R is 3438 (from 360*60/2 pi)*
& changing ardha Jya can be known when bow bends, Sine Table can be easily Computed

Example :

so *jyā* 45degrees = R sin (45degree) = 3438 x 0.7071 = 2431

See how closely values are matching with Modern mathematics

Sl. No	Angle (A) (in degrees, arcminutes)	Value in Āryabhaṭa's numerical notation (in Devanagari)	Value in Āryabhaṭa's numerical notation (in ISO 15919 transliteration)	Value in Hindu-Arabic numerals	Āryabhaṭa's value of *jya* (A)	Modern value of *jya* (A) (3438 × sin (A))
1	03° 45′	मखि	makhi	225	225′	224.8560
2	07° 30′	भखि	bhakhi	224	449′	448.7490
3	11° 15′	फखि	phakhi	222	671′	670.7205
4	15° 00′	धखि	dhakhi	219	890′	889.8199
5	18° 45′	णखि	ṇakhi	215	1105′	1105.1089
6	22° 30′	ञखि	ñakhi	210	1315′	1315.6656
7	26° 15′	ङखि	ṅakhi	205	1520′	1520.5885
8	30° 00′	हस्झ	hasjha	199	1719′	1719.0000
9	33° 45′	स्ककि	skaki	191	1910′	1910.0505
10	37° 30′	किस्ग	kisga	183	2093′	2092.9218
11	41° 15′	श्घकि	śghaki	174	2267′	2266.8309
12	45° 00′	किघ्व	kighva	164	2431′	2431.0331
13	48° 45′	घ्लकि	ghlaki	154	2585′	2584.8253
14	52° 30′	किग्र	kigra	143	2728′	2727.5488
15	56° 15′	हक्य	hakya	131	2859′	2858.5925
16	60° 00′	धकि	dhaki	119	2978′	2977.3953
17	63° 45′	किच	kica	106	3084′	3083.4485
18	67° 30′	स्ग	sga	93	3177′	3176.2978
19	71° 15′	झश	jhaśa	79	3256′	3255.5458
20	75° 00′	ञ्व	ñva	65	3321′	3320.8530
21	78° 45′	क्ल	kla	51	3372′	3371.9398
22	82° 30′	प्त	pta	37	3409′	3408.5874
23	86° 15′	फ	pha	22	3431′	3430.6390
24	90° 00′	छ	cha	7	3438′	3438.0000

***jyā* 45degrees**

sum of ***jya***
225+224+...164
= **2431**

6/n Aryabhatiya Treatise comprised of

-Gitikapada - Cosmology-Cryptic Encryption of BigNumbers

-Ganitapada-Arithmetic,Mensuration,Equations,

-Kalakriyapada-Planetary Motion

-Golapada- Geomtetry/Trignometry/Planets/Shapes

e.g. What Cryptic Number ■■■■■■ Contains? TRY IT YOURSELF!

CRYPTIC CODING OF HUGE NUMBERS IN LETTERS- *ARYABHATIYA*

अ	इ	उ	ऋ	ऌ	ए	ऐ	ओ	औ
10^0	10^2	10^4	10^6	10^8	10^{10}	10^{12}	10^{14}	10^{16}

क्	ख्	ग्	घ्	ङ्
1	2	3	4	5
च्	छ्	ज्	झ्	ञ्
6	7	8	9	10
ट्	ठ्	ड्	ढ्	ण्
11	12	13	14	15
त्	थ्	द्	ध्	न्
16	17	18	19	20
प्	फ्	ब्	भ्	म्
21	22	23	24	25
य्	र्	ल्	व्	
30	40	50	60	
श्	ष्	स्	ह्	
70	80	90	100	

ख्युघृ 2

युगरविभगणाः ख्युघृ शशि चयगियिङ्शुछ्लृ कु ङिशिबुणलृख्वृ प्राक्।
शनि ढुङिवघ्व गुरु खिच्युभ कुज भदिलङनुखृ भृगुबुधसौराः॥ 1॥
चन्द्रोच्चं ऋष्खिध[2] बुध सुगुशिधृन भृगु जषविखुछृ शेषार्काः।
बुफिनच पातविलोमा बुधाहृ न्यजार्कोदयाच्च लङ्कायाम्॥ 2॥

gitikapaad- Aryabhatiya

बुफिनच 1

बु	फि	न	च	बुफिनच 1
बxउ	फxइ	नxअ	चxअ	
ब=23 x उ=(10^4)	फ=22xइ=(10^2)	न=20xअ (10^0)	च=20xअ (10^0)	
23*10000	22*100	20*1	6*1	
230000	**2200**	**20**	**6**	**232226**

example 2 is also solved here likewise

ख्यु	घृ	ख्युघृ 2
(ख + यु)*उ	(घxऋ)	
(ख=2 x यु=30) *उ=(10^4)	घ=4xऋ=(10^6)	
(2+30)*10^4	4*10^6	
320000	**4000000**	**4320000**

TRY YOURSELF

सुगुशिधृन

Now Try your self and paste correct answers in Time Line Shall declare 1st 3 correct ones

7/n

-He Formalized Place Value System (Tens, Hundreds, Thousands). Please see the Shloka in the Illustration.

-Worked with numbers upto 10^62 (which means one hundred novemdecillion). CANT EXPLAIN HOW BIG IS IT. JUST SEE HERE

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एक च दश च शतं च सहस्रमयुतनियुते तथा प्रयुतम्।
कोट्यर्बुदं च वृन्दं स्थानात् स्थानं दशगुणं स्यात्॥ 2॥
अनुवाद—एक, दश, शत, सहस्र, अयुत, नियुत, प्रयुत, कोटि, अर्बुद तथा वृंद में प्रत्येक पिछले स्थान वाले से अगले स्थान वाला दस गुना है।

meaning - ones, tens, thousands, ten-thousands, hundred thousand, one million, ten million, hundred million, one billion, each is 10 more than the previous place holder.

ganitpaad, Aryabhata

	Indian notation	Power notation	Equivalent numeric representation	Short scale Western
एक (*ēka*)	1	10^0	1	One
दश (*daśa*)	10	10^1	10	Ten
शत (*śata*)	100	10^2	100	One hundred
सहस्र (*sahasra*)	1,000	10^3	1,000	One thousand
अयुत (*ayuta*)	10,000	10^4	10,000	Ten thousand
लक्ष (*lakṣa*)	1,00,000	10^5	100,000	One hundred thousand
नियुत (*niyuta*)	1,00,000 *daśa*	10^6	1,000,000	One million
कोटि (*kōṭi*)	1,00,000 *śata*	10^7	10,000,000	Ten million
शङ्कु (*śaṅku*)	1,00,000 *koṭi*	10^{12}	1,000,000,000,000	One trillion
महाशङ्कु (*mahāśaṅku*)	1,00,000 *śaṅku*	10^{17}	100,000,000,000,000,000	One hundred quadrillion
वृन्द (*vṛnda*)	1,00,000 *mahāśaṅku*	10^{22}	10,000,000,000,000,000,000,000	Ten sextillion (ten trilliard)
महावृन्द (*mahāvṛnda*)	1,00,000 *vṛnda*	10^{27}	1,000,000,000,000,000,000,000,000,000	One octillion
पद्म (*padma*)	1,00,000 *mahāvṛnda*	10^{32}	100,000,000,000,000,000,000,000,000,000,000	One hundred nonillion
महापद्म (*mahāpadma*)	1,00,000 *padma*	10^{37}	10,000,000,000,000,000,000,000,000,000,000,000,000	Ten undecillion
खर्व (*kharva*)	1,00,000 *mahāpadma*	10^{42}	1,000,000,000,000,000,000,000,000,000,000,000,000,000,000	One tredecillion
महाखर्व (*mahākharva*)	1,00,000 *kharva*	10^{47}	100,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000	One hundred quattuordecillion
समुद्र (*samudra*)	1,00,000 *mahākharva*	10^{52}	10,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000	Ten sexdecillion
ओघ (*ōgha*)	1,00,000 *samudra*	10^{57}	1,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000	One octodecillion
महौघ (*mahaugha*)	1,00,000 *ogha*	10^{62}	100,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000	One hundred novemdecillion

8/n
- Aryabhata (■■■■■■) was one of the Greatest. But DO WE KNOW OTHERS.

-Below Work is a compilation done of the CHRONOLOGY & DETAILS OF MAJOR MATHEMATICIANS, World Over from 800BC till 18th Century. The Details in the Illustration are not only AMAZE YOU but SHOCK as well !

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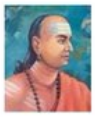
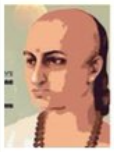
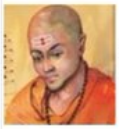
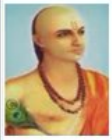
MATHEMATICIAN		PLACE	PERIOD	AREAS OF MATHEMATICAL WORKS	REMARKS
	VEDAS / VEDANGAS	BHARAT	OLDER THAN 10000BC	**RIG VEDA** **YAJUR-VEDA** (Satpatha Brahmana/Taittiriya Samhita) **ATHARVA-VEDA** **VEDANGAS** (Shiskha/Chandas/Kalpa/Jyotisha)	**VEDAS** are well preserved by *Shruti* and predate 10000 BC however mathematical Treatised based of them before 800 BC are Lost.
	BAUDHAYANA (INDIA)	BHARAT	800BC	**PREDATED PYTHAGOREAN THEOREM,** SULABH SUTRAS, SQUARE ROOTS, AREA OF TRIANGLE ,	**TREATISE-** Baudhāyana Sulbasūtra
	PINGALA (Attock, present PAKISTAN)	BHARAT	500BC	BINOMIAL NUMBERS AND WORKS **PREDATED FIBNOCCI SERIES,** PREDATES PASCALS TRIANGE	**TREATISE**-ChandraSastra
	PYTHAGORAS (Samos, GREECE)	GREEK	570-495BC	COPIED PYTHAGOREAN THEOREM AFTER VISIT TO INDIA TO LEARN MATHEMATICS	HE USED THE EXISTING INDIAN WORKS OF **BAUDHAYAN & PINGALA**
	EUCLID (Alexandria, EGYPT)	EGYPT	400-300BC	ELEMENTS BOOK ON GEOMETARY, PRIME NO, ARITHMETIC HEAVILY USED WORKS OF INDIAN MATHEMATICS	HE USED THE EXISTING INDIAN WORKS OF **PINGALA/PANINI / BAUDHYANA**
	VARAHAMIHIRA (Malwa, M.P.)	BHARAT	505-587AD	PLANETARY MOTION, ECLIPSES, SEASONS, ARCHITECTURE, **TRIGONOMETRY,** OPTICS, **PERMUTATION/COMBINATION**	**TREATISE**-Brihat-Samhita Pancha-Siddhantika
	ARYABHATA (Patna, BIHAR)	BHARAT	476-550AD	**PLACE VALUE SYSTEM,** ALGEBRA, HELIOCENTRISM, MENSURATION, **ARITHMETIC, TRIGNOMETRY, SINE TABLES, CALCULUS, GEOMETRIC PROGRESSIONS,** POWER SERIES, CONTINUOUS FRACTIONS, DAYS OF YEAR, AREA OF TRIANGLE, **EARTH IS ROUND,**QUADRATIC EQUATIONS, PLANETARY MOTION & PLANES, ECLIPSES	**TREATISE-** Aryabhatiya *- Gitikapada* *-Ganitapada* *-Kalakriyapada* *-Golapada*
	BRAHMAGUPTA (Jalore, RAJSTHAN)	BHARAT	598-668AD	**MATHEMATICAL OPERATIONS WITH ZERO AND NEGATIVE NUMBERS,** FRACTIONS, **SUM OF FIRST N NATURAL NOS, GRAVITY,** LINEAR EQUATIONS, LEMMA, PREDATES PELL'S EQUATION, TRIGNOMETRY, ALGEBRA,	**TREATISE-** Brāhmasphuṭasiddhānta Khaṇḍakhādyaka
	BHASKARA I (Parbhani, MAHARASHTRA)	BHARAT	600-680AD	**POPULARIZED BRAHMI NUMERALS (MODERN DAY (0,1,2,9) SYMBOL FOR ZERO,PRIME NUMBER THEORY, DECIMAL SYSTEM,** DEVELOPED WORKS OF ARYABHATTA ON TRIGNOMETRY, PI, AND EQUATIONS	**TREATISE-** Āryabhaṭīyabhāṣya Mahābhāskarīya Laghubhāskarīya

9/n But Let's Revisit the WORLD GEOGRAPHY -PERSIA, ROME, UK, EGYPT, GREEK, Before Going to Next Tweet in the THREAD.

Check the Illustration below-

10/n But MOST People think Everything Originated in EUROPE, Egypt and Greek .

-BUT WHY ?

-WHAT IS THE TRUTH ? WHERE IS THE EVIDENCE?

The below illustration is an extensive Research that will Open the SECRETS of this HIDDEN HISTORY. A BIG EXPOSE !!

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SPREAD WHERE/ WHEN?	HISTORICAL EVIDENCES
SPREAD TO GREECE (4000-300 BC)	-**In Sankrit *Yavana* means Greek. During Mahabharta era around min 3200BC, (around 5200BC as per Nilesh Oak) Jarasandh allies with Kalvayana, the Yavan (Greek) King to Fight Lord Krishna at Mathura**. So India-Greek Relation is Very Old, Many of Greek Gods and Legends are common with Sanatan Dharam (Hinduism) . **RIG VEDA, YAJUR-VEDA***(Satpatha Brahmana/Taittiriya Samhita)* , **ATHARVA-VEDA, VEDANGAS***(Shiskha/Chandas/Kalpa/Jyotisha)* as old as **>10,000BC** *(by researchers)* , contain core **Mathematics** -Also Greek Historians have been living in India to Learn and pass on Knowledge on indian Philosophy/Science/Mathematics/Society e.g. **Megasthanese (350BC-290BC) lived for several decades** in India and passed on his knowledge to GREECE; **composed book INDICA**
SPREAD TO EGYPT (4000- 300 BC)	-**Pre Islamic/Pre Christian EGYPT dates back to 4000BC.** At that time Many of Greek Gods and Legends are common with Sanatan Dharam (Hinduism). -Lothal was Ancient Harrapa Port towal in Gujrat had most ancient **dockyard dated as old as 3700 BC** as per ASI studies. **Dwarka and Lothal** would trade in **mettalurgy, gemstones , spices, weapons as far as Egypt/Greece thru sea route.** Along with this knowledge on Philosophy/Science/Mathematics was also transferred. - **PYRAMIDS Built Around 2500 BC** needed knowledge of **Geometry, Astronomy, Arithmetic.** RIG VEDA, YAJUR-VEDA*(Satpatha Brahmana/Taittiriya Samhita)* , ATHARVA-VEDA, VEDANGAS, *(Shiskha/Chandas/Kalpa/Jyotisha)* as old as >10,000BC, contain core mathematics. -**Egypt is also naval neighbour/ trading partner to Greek** through a close Sea Route. and knowledge transfer is imminent
SPREAD TO MIDDLE-EAST (780-1050AD)	-**Parsis in india are persecuted Persians of present Day Iran.** Iran had buddhism till 2nd Cent AD, then Zoarastrian till Islamic Invasion. **Perisan imported Chess from India.** -Persian Kings **Anushirvan** (501 - 579 AD), **Ardeshir** (180- 242 AD), Barmaks (705 782 AD) sent various courteers and residents to India to Learn from Science, Mathematics to Medicine -**Persian Scholars like Al-Biruni Spent 11 Years in India** Learning Sanskrit and Indian, Science Literature & Mathematics.
SPREAD TO EUROPE (1500-1800AD)	-**ROBERT OF CHESTER / ROBERT OF KETTON/GHERAD OF CREMONA** and many other English Arab Men **during 12th Century** (1140-1150) translated many **Middle East Arabic Works to LATIN (Dominant European Language).** Including Indian Mathematics, Mettalurgy, Sciences Learnt by Middle East from India. Within some decades Englishmen understood the the **source of all Knowledge** and Wealth/Trade was India. -India had **Finest Navigation**, Using Trignoemtry, **and Sine Tables were** Key to Travel **World by Sea**. - **English men had great NEED** to TRavel for Missionary Activities & Trade also. -**Vasco De Gama,** helped by Indian, came to india at **Kozhikode, Kerala** on missionary quest in 1498 . -**JESUITS- Society of Jesus** were formed in 1540 -**Between 1500 - 1600** many **Jesuit missionaries** flocked Kerala. -Even simple Multiplications in **ROMAN NUMBERALS** would required days to calculate. **How come suddenly Europeans became a Doyen in Mathematics?** --> that led to Science and the Technology --> resulting in Industrial revolution- 1760 – 1840 -Some of the knowledge they borrowed from the Greeks /Egyptians (who already had learnt it from India), However, most of the cases (from **Mathematics, to Navigation, to Calender System)** they used Existing Indian works of **BRAHMGUPTA, ARYABHATA, BHASKARA2, VIRASENA, MADHAVA, NILKANTHA as** it was **IMPOSSIBLE** in existing systems like ROMAN NUMBER SYSTEM & available EUROPEAN Knowledge Levels.

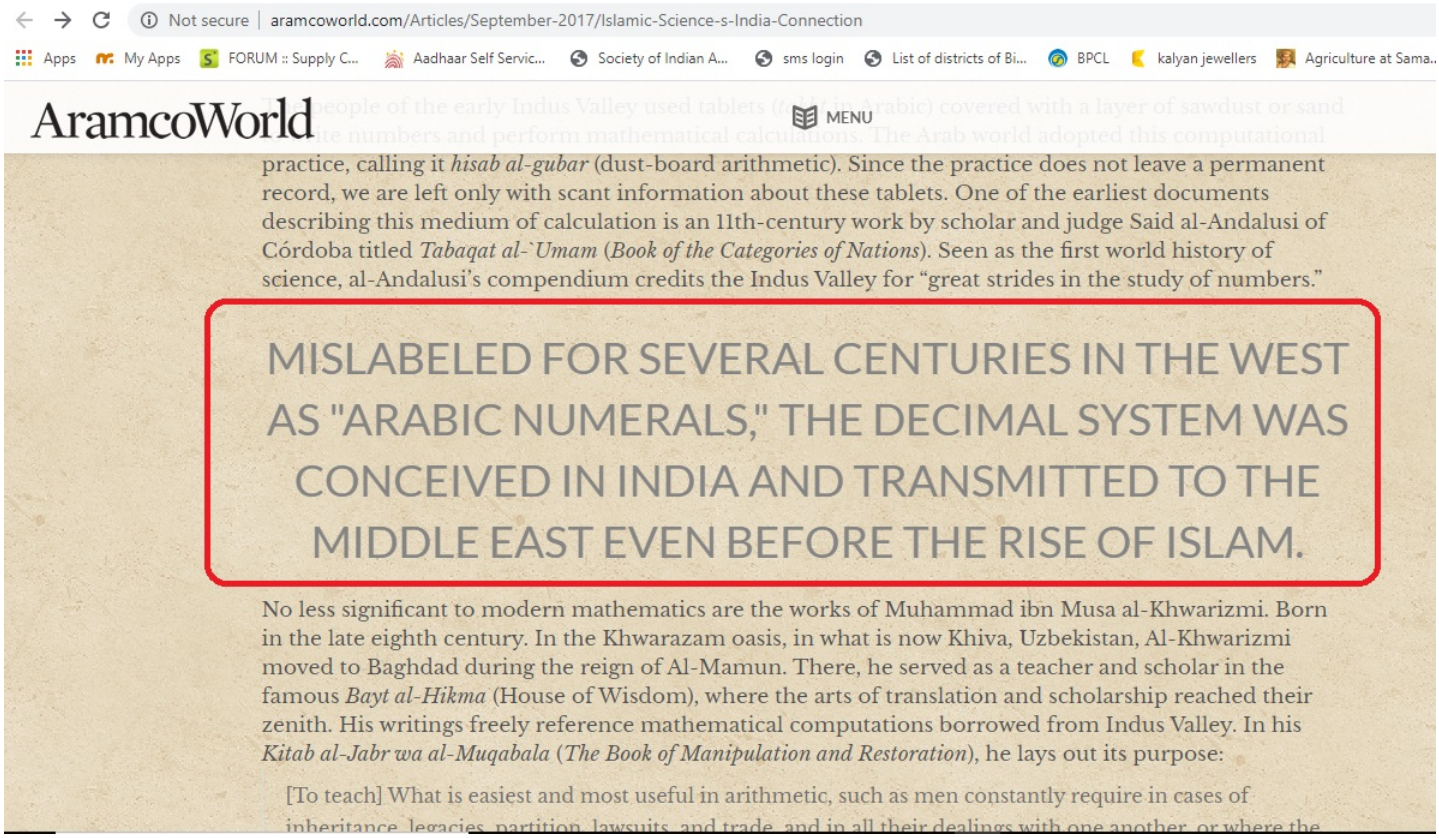
11/n

ROBERT OF CHESTER / ROBERT OF KETTON/GHERAD OF CREMONA & many other English Men during 12th Century

(1140-50) translated many Middle East Arabic Works to LATIN (Dominant European Language). Including Indian Mathematics, Metallurgy,Sciences Learnt by Middle East from India.

12/n Let's Now now see the Journey of very familiar "sin & cos" from INDIA to EUROPE
■■■■ /■■■■ to "sin"
■■■■■■■■/■■■■■■■ to "cos"

13/n- But it is said many times there can be "OWNERS BIAS". So an Indian will praise an Indian always. But Wait. See the Website of Saudi Aramco owned by Govt of SAUDI ARABIA. Check the Article- CAN THERE BE BIGGER PROOF THAN THIS ? They HAVE ALWAYS GAVE CREDIT TO US



14/n- Please pause for a While, Think what all we and our youngsters have missed from BAUDHAYANA , PINGALA, VARAHMIRA, ARYABHATA, BHRAMAGUPTA, BHASKARA, VIRASENA, HEMACHANDRA, MADHAVA, NILAKANTHA. ■■ ■■■■ ■■■■■■ ■■ ■■■■ ■■■■ ■■ ■■ ■■■■■■ ■■■■■ Always Remember the illustration:

JOURNEY FROM BRAHMI NUMERALS TILL TODAY

@rapperpandit credits - Journal of Institue of Engg , 2018, 14 (1): 136- 142
Evidences of Heirarchy of Brahmi Numeral System - by Eka Ratna Acharya