Salutations to ‘Mother India’ and one of her most glorious sons ‘Swami Vivekanananda’
## Indian Language (Sanskrit)

<table>
<thead>
<tr>
<th>Gutturals</th>
<th>क</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Palatals</th>
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| Cerebrals/ | त | थ | द | ध | ण |
| Retroflex  | ta | tha | da | dha | na |

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<thead>
<tr>
<th>Dentals</th>
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<thead>
<tr>
<th>Labials</th>
<th>प</th>
<th>फ</th>
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<thead>
<tr>
<th>Semivowels</th>
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<th>र</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Sibilants</th>
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<tr>
<th>Aspirate</th>
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<table>
<thead>
<tr>
<th>Conjuncts</th>
<th>क्ष</th>
<th>क + ष</th>
<th>ज्ञ</th>
<th>ज + ज</th>
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</thead>
<tbody>
<tr>
<td>kṣa</td>
<td>k + ṣ</td>
<td>ḷṇa</td>
<td>ḷ + ḷ</td>
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</table>

- **Gutturals:** Throat in use, tongue moves at the base
- **Palatals:** Tongue touches the back of the palate
- **Cerebrals/Retroflex:** Back of the tongue touches the front of the palate
- **Dentals:** Tongue touches the teeth
- **Labials:** Lips used in making these sounds
- **Semivowels:** Vowel like sounds but consonants
- **Sibilants:** Hissing sound
- **Aspirate:** Sound made while expiration
- **Conjuncts:** Consonants made using others consonants

Swami Vivekananda: Sanskrit language is so intricate, the Sanskrit of the Vedas is so ancient, and the Sanskrit philology so perfect...

Give Sanskrit a try: A very good start can be had at [http://sanskrit-lamp.org/](http://sanskrit-lamp.org/)
Indian Geometry

Proof I: Pythagoras Theorem

Area (ABCDE) = Area (ABC) + Area (CDE) + Area (ACE)

=> \( \frac{1}{2}(BD)(AB + DE) = \frac{1}{2}(BC)(AB) + \frac{1}{2}(CD)(DE) + \frac{1}{2}(AC)(CE) \)

=> \( \frac{1}{2}(a+b)(a+b) = \frac{1}{2}(b)(a) + \frac{1}{2}(a)(b) + \frac{1}{2}(c)(c) \)

=> \( \frac{1}{2}(a+b)^2 = ab + \frac{1}{2}(c)^2 \)

=> \( a^2 + b^2 = c^2 \)

Proof II: Pythagoras Theorem

Area (ABCD) = Area (EFGH) + 4 X Area (AEH)

=> \( (AB)(AD) = (EH)(HG) + 4 \times \frac{1}{2}(AE)(AH) \)

=> \( (a+b)(a+b) = (c)(c) + 4 \times \frac{1}{2}(a)(b) \)

=> \( (a+b)^2 = c^2 + 2ab \)

=> \( a^2 + b^2 = c^2 \)

Even more India has done in mathematics, for algebra, geometry, astronomy, and the triumph of modern science -- mixed mathematics -- were all invented in India…

In Pythagoras, Socrates, Plato, and the Egyptian neo-platonists, we can find traces of Indian thought…

When such concise proofs of the Pythagoras theorem exist in the Vedas (written centuries before Pythagoras), should we rename the theorem? Who knows what more is hidden in the Vedas!!

Reference: Vedic Mathematics by Jagadguru Swami Sri Bharati Krishna Tirthaji Maharaja (Sankaracharya of Govardhana Matha, Puri)
Indian Number System: Multiplication Method I

13  
14

13+3
14+4

For ease

13+3
14+4

3 \times 4 = 12

14+3+1 = 18

18/2

13+3
14+4

or

18/2

13+4+1 = 18

14  
182

Algebraic Proof

(10+3) \times (10+4) \rightarrow 100 + 30 + 40 + 12 \rightarrow 130 + 40 + 12 \rightarrow 170 + 12

or

140 + 30 + 12

182 \leftrightarrow 180 + 2

This method is better for numbers close to powers of 10 but can be very well adapted for any two numbers.

The ten numerals, the very cornerstone of all present civilization, were discovered in India, and are in reality, Sanskrit words…

Swami Vivekananda

When the whole world was playing with sticks and stones Indians were busy exploring the physical sciences and coming up with such excellent methods 5000 years (or more?) ago!!
Indian Number System: Multiplication Method II

Algebraic Proof

This method is general and can be used for any two numbers.

Try and master this method! Only one line is needed regardless of the size of the numbers involved!

We owe a lot to the Indians, who taught us how to count, without which no worthwhile scientific discovery could have been made.

Albert Einstein
India: Citadel of Knowledge

Will Durant (American Historian)
Indeed, if I may be allowed the anachronism, the Hindus were Spinozites more than two thousand years before Spinoza, Darwinians many centuries before Darwin, and evolutionists many centuries before any word like evolution existed in any language of the world.

Sir Monier Williams (British Professor)
India is, the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition.

Our most valuable and most instructive materials in the history of man are treasured up in India only.

Romain Rolland (French Scholar)
If there is one place on the face of earth where all the dreams of living men have found a home from the very earliest days when man began the dream of existence, it is India.

Max Mueller (German Scholar)
If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered over the greatest problems of life, and has found solutions of some of them which well deserve the attention even of those who have studied Plato and Kant, I should point to India.

Mark Twain (American Author)
The land where humanity has attained its highest towards gentleness, towards generosity, towards purity, towards calmness, above all, the land of introspection and of spirituality - it is India.

Swami Vivekananda
India was the motherland of our race, and Sanskrit the mother of Europe's languages: she was the mother of our philosophy; mother, through the Arabs, of much of our mathematics; mother, through the Buddha, of the ideals embodied in Christianity; mother, through the village community, of self-government and democracy. Mother India is in many ways the mother of us all.
Indians Wanted More Knowledge

But Indians were not satisfied with objective knowledge, they turned their attention towards the 'knower'.

If a man wants to know this universe bit by bit he must know every individual grain of sand, which means infinite time; he cannot know all of them. Then how can knowledge be?

– Swami Vivekananda

Who am I?

Is there anything beyond this sensual world?

Is the knower (subject) more important than the known (object)?

What is the purpose of life?

The question is raised in the Vedas, "What is that, knowing which, we shall know everything?“ – Swami Vivekananda

We say Newton discovered gravitation. Was it sitting anywhere in a corner waiting for him? It was in his own mind; the time came and he found it out. All knowledge that the world has ever received comes from the mind; the infinite library of the universe is in your own mind. The external world is simply the suggestion, the occasion, which sets you to study your own mind, but the object of your study is always your own mind. The falling of an apple gave the suggestion to Newton, and he studied his own mind. He rearranged all the previous links of thought in his mind and discovered a new link among them, which we call the law of gravitation. It was not in the apple nor in anything in the centre of the earth. – Swami Vivekananda
Indian Philosophy

Six Schools of Indian Philosophy

Nyaya
Vaisesika
Samkhya
Yoga
Mimamsa
Vedanta

In Kapila’s doctrine (Samkhya Philosophy), for the first time in the history of the world, the complete independence and freedom of the human mind, its full confidence in its own powers, was exhibited. - Richard Garbe (German Professor)

A careful study of these six schools of Indian Philosophy shows that they contain the highest truths known to the ancient Greeks. Phytagoras, Thales, and Parmenides were indebted to the early Hindu sages. Modern Philosophy likewise has drawn inspiration from the same spring. – Brian Brown (Author)

Swami Vivekananda

The thought process of the Western philosopher are such that he is antagonistic to the physicist whereas the Hindu philosopher is sympathetic. - Joseph Kalpan (Physicist)

Crossing over mountains, rivers, and oceans, setting at naught, as it were, the obstacles of the distance of space and time, the blood of Indian thought has flowed, and is still flowing into the veins of other nations of the globe, whether in a distinct or in some subtle unknown way.

Indian Philosophers rationally analyzed everything that their mind could get hold of; even the process of rationalization was torn apart and shown to be incapable when it comes to the realization of the Self!!
India’s Fairest Flower I: Yoga

Yoga means to join. To join what? To join Individual Consciousness with the Universal Consciousness. It is the scientific system laid down by the ancient seers of India to help man to churn out the greatest truths from his own mind! There is something for everyone 😊
Consciousness is never experienced in the plural, only in the singular… How does the idea of plurality (so emphatically opposed by the Upanishadic writers) arise at all? Consciousness finds itself intimately connected with, and dependent on, the physical state of a limited region of matter, the body… Now, there is a great plurality of similar bodies. Hence the pluralization of consciousness or minds seems a very suggestive hypothesis. Probably all simple ingenuous people, as well as great majority of Western philosophers, have accepted it… The only possible alternative is simply to keep to the immediate experience that consciousness is a singular of which the plural is unknown; that there is only one thing and that, what seems to be a plurality, is merely a series of different aspects of this one thing, produced by a deception (the Indian Maya) – Erwin Schrödinger (Quantum Physicist)

Verily, not for the sake of the husband, my dear, is the husband loved, but he is loved for the sake of the self which, in its true nature, is one with the Supreme Self. Verily, not for the sake of the wife, my dear, is the wife loved, but she is loved for the sake of the self.

In the whole world there is no study so beneficial and so elevating as that of the Upanishads. It has been the solace of my life; it will be the solace of my death.

Strength, strength is what the Upanishads speak to me from every page. This is the one great thing to remember, it has been the one great lesson I have been taught in my life; strength, it says, strength. O man, be not weak… Ay, it is the only literature in the world where you find the word "Abhih", "fearless", used again and again; in no other scripture in the world is this adjective applied either to God or to man. Abhih, fearless!
Romain Rolland (French Nobel Laureate) looked for peace around the First World War and asked Rabindranath Tagore (Indian Nobel Laureate) that he wanted to know about India (the land of peace, tranquility and spirituality). Tagore gave the most appropriate reply, “If you want to know India, study Vivekananda. In him everything is positive and nothing negative.”

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<td>I cannot write about Vivekananda without going into raptures. Few indeed could comprehend or fathom him. Swamiji was a full-blooded masculine personality and a fighter to the core of his being. I can go on for hours and yet fail to do the slightest justice to that great man. If he had been alive, I would have been at his feet.</td>
<td>Where can you find a man like him? Study what he wrote, and learn from his teachings, for if you do, you will gain immense strength. Take advantage of the fountain of wisdom, of Spirit, and of fire that flowed through Vivekananda.</td>
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<tr>
<td><strong>Netaji Subhash Chandra Bose</strong></td>
<td><strong>Jawaharlal Nehru (Former Prime Minister of India)</strong></td>
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The man is simply a wonder for oratorical power... the Swami is an honor to humanity. - **William James** (Harvard Professor)

Twelve centuries ago Shankara was the only great personality who not only spoke of the purity of our religion... but also brought all this into action. Swami Vivekananda is a person of that stature. – **Bal Gangadhar Tilak**

It is a solemn duty of Hindu race that as long as it survives, it must keep the memory of Vivekananda with the same regard, as with which it remembers Vyasa and Valmiki. - **Ramdhari Singh Dinkar**

He was a power. A very lion among men. – **Sri Aurobindo**

After about a century, the advice is still the same, “If you want to know India, study Vivekananda. In him everything is positive and nothing negative.”
Swami Vivekanananda’s clarion call to his Motherland - India

**Spiritual life is the true genius of India.** Those who make the greatest appeal to the Indian mind are not the military conquerors, not the rich merchants or the great diplomats, but the holy sages, the rishis who embody spirituality at its finest and purest. India's pride is that almost in every generation and in every part of the country, from the time of her recorded history, she has produced those holy men who embody for her all that the country holds most dear and sacred. - Henry David Thoreau (American Author)

There was one thing however, deep in the Master's nature, that he himself never knew how to adjust. **This was his love of his country and his resentment of her suffering.** Throughout those years in which I saw him almost daily, the thought of India was to him like the air he breathed... But he was born a lover, and the queen of his adoration was his Motherland. Like some delicately poised bell, thrilled and vibrated by every sound that falls upon it, was his heart to all that concerned her. – Sister Nivedita about Swami Vivekananda

Let others talk of politics, of the glory of acquisition of immense wealth poured in by trade, of the power and spread of commercialism, of the glorious fountain of physical liberty; but these the Hindu mind does not understand and does not want to understand. Touch him on spirituality, on religion, on God, on the soul, on the Infinite, on spiritual freedom, and I assure you, the lowest peasant in India is better informed on these subjects than many a so-called philosopher in other lands. I have said, gentlemen, that we have yet something to teach to the world. **This is the very reason, the raison d'être, that this nation has lived on, in spite of hundreds of years of persecution, in spite of nearly a thousand years of foreign rule and foreign oppression.** This nation still lives; the raison d'être is it still holds to God, to the treasure - house of religion and spirituality. – Swami Vivekananda

**Arise! Awake! and stop not till the goal is reached.**