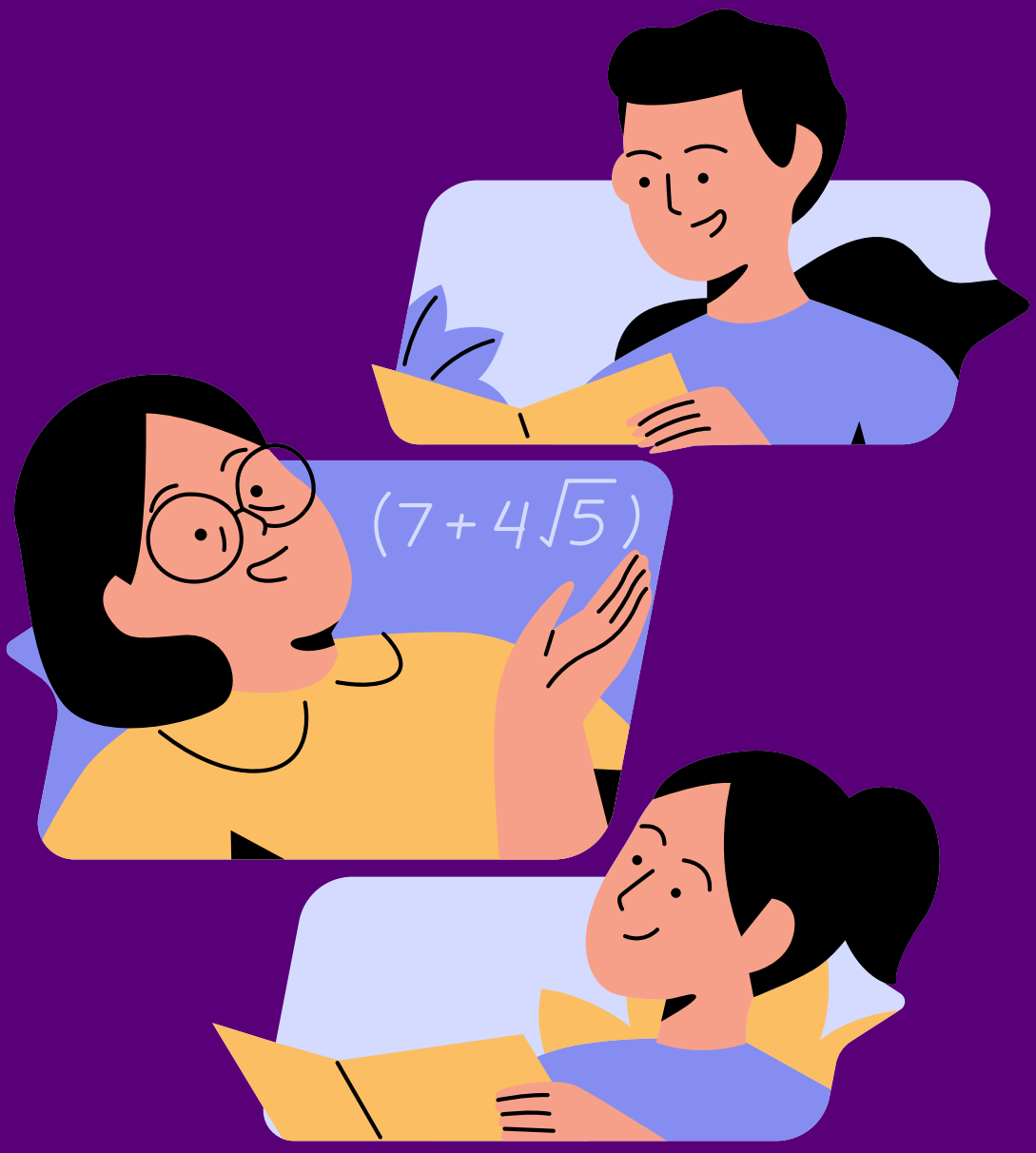
How many Vedic Maths Tricks are there?



How many Vedic Maths Tricks are there?

Vedic Maths encompasses a wide range of techniques and tricks for performing mathematical calculations.

While the exact number of tricks can vary depending on different interpretations and sources.

These are some commonly taught Vedic Maths tricks:

#1 Multiplication

Vedic Maths offers several tricks and techniques for multiplication.

1. **Ekadhikena Purvena (By One More than the Previous):**
    - This trick is used when multiplying numbers that end in 9. To perform the multiplication, follow these steps:
        - Subtract 1 from the number being multiplied.
        - The resulting number becomes the first part of the answer.
        - Subtract the original number's units digit from 10, and this becomes the second part of the answer.
        - Concatenate the two parts to obtain the final answer.
2. **Example: To multiply 29 by 9 using Ekadhikena Purvena:**
    - Subtract 1 from 29: 29 - 1 = 28.

- Subtract 9's units digit (which is 9) from 10: 10 - 9 = 1.
- Concatenate the two parts: 281 is the final answer.

3. **Nikhilam Navatashcaramam Dashatah (All from 9 and the Last from 10):**
    - This technique is used when multiplying a number by 9, 99, 999, and so on. To apply this trick:
        - Subtract the number being multiplied from a power of 10 (such as 10, 100, 1000, etc.).
        - The resulting number becomes the first part of the answer.
        - Subtract the difference between the power of 10 and the original number from the original number's units digit, and this becomes the second part of the answer.
        - Concatenate the two parts to obtain the final answer.
4. **Example: To multiply 37 by 99 using Nikhilam Navatashcaramam Dashatah:**
    - Subtract 37 from 100: 100 - 37 = 63.
    - Subtract the difference (100 - 37 = 63) from 9's units digit (which is 9): 9 - 3 = 6.
    - Concatenate the two parts: 3663 is the final answer.
5. **Urdhva-Tiryak Sutra (Vertically and Crosswise):**
    - This technique is used to multiply numbers with complementary differences. Here's how it works:

        - Identify the complementary differences between the numbers being multiplied and a common base.
        - Multiply the complementary differences.
        - Cross-multiply and add the results.
        - Combine the products to obtain the final answer.

6. **Example: To multiply 43 by 47 using Urdhva-Tiryak Sutra:**
    - The complementary difference is 3 (47 - 43 = 4, 4 - 1 = 3).
    - Multiply the complementary differences: 3 * 3 = 9.
    - Cross-multiply and add: (4 * 7) + (3 * 4) = 28 + 12 = 40.
    - Combine products: 40 and 9 to obtain 2020, which is the final answer.

These are just a few examples of Vedic Maths multiplication tricks.

#2 Division

Vedic Maths offers several tricks and techniques for division.

1. **Anurupyena (Proportionately):**
    - This trick is used when dividing a number by another number close to a base. To apply this technique:
        - Find the difference between the divisor and the base number.
        - Divide the dividend proportionately by this difference.

        - Adjust the quotient if necessary.

2. **Example: To divide 492 by 8 using Anurupyena:**
    - The base number is 10, and the difference between 8 and 10 is 2.
    - Divide 492 by 2: 492 ÷ 2 = 246.
    - Adjust the quotient if necessary: The quotient is 246, which is the final answer.
3. **Antyayor Dasake'pi (By the Last Digits):**
    - This technique is used when dividing by numbers ending in the same digit. To apply this trick:
        - Multiply the last digit of the divisor by the last digit of the quotient.
        - Append the product to the right of the dividend's remaining digits to obtain the final answer.
4. **Example: To divide 486 by 6 using Antyayor Dasake'pi:**
    - Multiply the last digit of the divisor (6) by the last digit of the quotient (1): 6 * 1 = 6.
    - Append 6 to the remaining digits of the dividend (48): The final answer is 486.
5. **Ekanyunena Purvena (By One Less than the Previous):**
    - This technique is used when dividing a number by a digit that is one less than the previous digit. To apply this trick:

        - Increment the divisor by 1.
        - Divide the dividend by this new divisor.
        - Adjust the quotient if necessary.

6. **Example: To divide 783 by 9 using Ekanyunena Purvena:**
    - Increment 9 by 1: 9 + 1 = 10.
    - Divide 783 by 10: 783 ÷ 10 = 78.3.
    - Adjust the quotient if necessary: The quotient is 78.3, which is the final answer.

These are a few examples of Vedic Maths division tricks.

#3 Squaring

Vedic Maths offers several tricks and techniques for squaring numbers.

1. **Ekadhikena Purvena (By One More than the Previous):**
    - This trick is used when squaring numbers that end in 5. To apply this technique:
        - Take the digit(s) before 5 and multiply it by the next higher digit.
        - Append 25 to the result obtained in the previous step to get the final answer.

2. **Example: To square 35 using Ekadhikena Purvena:**
    - Multiply the digit before 5 (3) by the next higher digit (4): 3 * 4 = 12.

- Append 25 to the result: The final answer is 1225.

3. **Nikhilam Navatashcaramam Dashatah (All from 9 and the Last from 10):**
    - This technique is used to square numbers close to a base. To apply this trick:
        - Subtract the number being squared from a power of 10 (such as 10, 100, 1000, etc.).
        - Multiply the difference by the original number.
        - Add the square of the difference to the result obtained in the previous step to get the final answer.
4. **Example: To square 98 using Nikhilam Navatashcaramam Dashatah:**
    - Subtract 98 from 100: 100 - 98 = 2.
    - Multiply the difference (2) by the original number (98): 2 * 98 = 196.
    - Add the square of the difference (2^2 = 4) to the previous result: 196 + 4 = 200.
    - The final answer is 9604.
5. **Vedic Square Technique:**
    - This technique allows you to find the square of any number using cross multiplication. It involves breaking down the number into smaller parts and performing cross-multiplication to obtain the final answer.

6. **Example: To square 53 using the Vedic Square Technique:**
    - Break down 53 into 50 and 3.
    - Cross multiply: (50 * 50) + (50 * 3) + (3 * 50) + (3 * 3) = 2500 + 150 + 150 + 9 = 2809.
    - The final answer is 2809.

These are just a few examples of Vedic Maths squaring tricks.

#4 Square Roots

Vedic Maths offers techniques for finding approximate square roots of numbers.

1. **Shreedharacharya's Method:**
    - This technique is used to find the square root of perfect squares or numbers that are close to perfect squares. To apply this trick:
        - Divide the given number into equal parts or groups.
        - Take the square root of the largest perfect square within the given number.
        - Adjust the square root by considering the remaining parts.
2. **Example: To estimate the square root of 4225 using Shreedharacharya's Method:**
    - Divide 4225 into groups (e.g., 42 and 25).
    - The largest perfect square within 4225 is 40^2 = 1600.

- The square root of 1600 is 40.
- Adjust for the remaining parts (25): The estimated square root is 40 + 5 = 45.

3. **Vedic Square Root Technique:**
    - This technique allows you to estimate the square root of a number by identifying a close base number and applying patterns. To apply this trick:
        - Identify a base number close to the given number whose square root is known.
        - Determine the difference between the given number and the base number.
        - Apply pattern-based adjustments to estimate the square root.
4. **Example: To estimate the square root of 65 using the Vedic Square Root Technique:**
    - The base number closest to 65 is 64 (whose square root is 8).
    - The difference between 65 and 64 is 1.
    - Apply pattern-based adjustments: Add half of the difference to the base number's square root.
    - Half of 1 is 0.5, so add 0.5 to 8: The estimated square root is 8.5.

These techniques provide approximate estimates of square roots.

#5 Addition and Subtraction

Vedic Maths offers techniques and tricks for performing addition and subtraction efficiently.

1. **Sutra-based Methods:**
    - Vedic Maths utilizes specific formulas and patterns known as "sutras" for addition and subtraction. These sutras provide alternative approaches to conventional methods and can make calculations faster and more intuitive.
2. **Example:**
    - "Nikhilam Sutra" (All from 9 and the last from 10): This sutra can be used for subtraction when dealing with numbers close to a base. It involves subtracting each digit from 9, except for the last digit, which is subtracted from 10.
3. **Specific Sum/Difference Techniques:**
    - Vedic Maths provides specific techniques for adding or subtracting pairs of numbers that follow certain patterns or have complementary differences. These techniques exploit the numerical properties to simplify the calculations.
4. **Example:**
    - Specific Sum Technique: Adding numbers with complementary differences.
    - Specific Difference Technique: Subtracting numbers with complementary differences.

These are just a few examples of the numerous Vedic Maths tricks available.

The actual number of tricks can vary depending on different Vedic Maths sources and interpretations.

It's worth noting that Vedic Maths is a comprehensive system, and the techniques taught cover a broad range of mathematical operations and concepts.

Exploring Vedic Maths further can uncover additional tricks and techniques, providing individuals with a vast toolkit for mental calculations and problem-solving.

Thank you for reading.


Thank
You