NOW YOU CAN PLAY WITH YOUR POCKET CALCULATOR

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I assume that you are in possession of a pocket calculator which you probably use for your arithmetical problems or for preparing the bills. But you will see how a great many more things can be done with this mini machine.

In fact, this tiny machine can be made to talk — provided one settles for words that contain the letters i, e, o, l, h and s. For example, try with the number 107734; enter the digits and read by turning the calculator upside down!

Another way of having the machine show off its vocabulary is to think of the word you want displayed and then work up a problem that gives that word. During the oil crisis period, one asked his friend, "Where did you get oil for your car?" The friend andswered by multiplying 142.15469 by 5 and showing the results on a calculator upside down. Another time he answered by multiplying 284.02212 by 2.5 and showing the results upside down.

Before introducing some games with the calculator, two pre - assumptions are being made. The first is that the readers (or at least the persons they wish to impress with these games) are not mathematical wizards (the calculator is, of course). The second is that a medium - priced standard calculator with facilities of the four basic arithmetical operations, viz, addition, subtraction, multiplication and division, is available with the readers. With these assumptions the games follow:

First game

The calculator is well schooled in Indian history. The calculation 6760.4573 X 234 will cause the machine to give you an important date of Indian history. Try it. (No need to turn your calculator upside down this time.)

Second game

The calculator can tell the exact date and month of birth of your friend along with his age. Hand over your machine to your friend and ask him to record the number representing the month of his birth (January as 1, March 3, and so on) and to multiply it by 100. Ask him to add his date of birth, then to multiply the result by 2 and to add 9. He should again multiply by 5, add 8, multiply by 10, and subtract 422. Then ask him to add his age (in years). At this stage you may take back the machine from him and subtract 108. Now the calculator shows his date of birth — the first digit(s) gives the month of his birth, the next two the date (zero appears as the first of these 2 digits if the date is less than 10) and the last two digits give his age. A real fun, of course!

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Third game

Ask anyone to count the value of coins (in paise) that may be lying in his pocket. If the total is less than a rupee, ask him to record the total in the calculator. Then request him to multiply by 10, and add 1, again to multiply by 2 and to add 21, and finally to multiply by 5. The result will always be a number ending with 15. The figure to its left is always one more than the actual total value of coins your friend had in his pocket.

Fourth game

Request someone to imagine a number (any up to six digits) and to record it in the machine. Ask him to multiply it by 2 and to add 4; then to multiply the result by 5 and to add 12; and finally to multiply by 10 and to subtract 320. The result is a number ending with one or more zeros. Drop them and the figure left over is the number your friend started with.

Fifth game

Announce that you can give the sum of all the odd numbers, from one up to and including whatever odd number someone in your audience chooses. Increase the selected odd number by 1, divide by 2 and square the result. You will have the desired total.

In case someone challenges that you can accomplish only in giving the sum of odd numbers, you can hoodwink him by giving the sum of all the numbers (odd and even). Ask him to choose any odd number. As before, increase the number by 1, divide by 2, square the result. Now double the answer and subtract the number that you had squared. You will have the sum of all the numbers from one to the odd number which your friend had chosen.

Sixth game

Now a game involving one's age and the coins lying in one's pocket. Ask someone to double his age and to record it in the machine. Then tell him to add 5 and multiply by 50. Now request him to add the amount of change (in paise) lying in his pocket (this must be less than a rupee). At this stage you may take the calculator from him and subtract the number of days (365) in a year, add 115 and divide by 100. The result obtained has two parts — one or two numbers to the left of the decimal point (one, if your friend is less than 10 years old) and two numbers on the right. The number on the left gives his age, and that on the right gives the total amount of coins lying in his pocket.

Lastly, a remarkable quirk number. It is 3025. Split it up into two parts — 30 and 25. Add them up and square the result. See what the mini wizard displays. □