Any Maths Wizards?

The number nine has for decades been intriguing me as a kind of magical number but I have never really discovered the reason why. The number nine has some curious properties that are unique.

Try and multiply nine by any number and if you add up the digits of its products you always get nine. For example 9x7=63 and 6+3=9. If the number multiplied is large (say 33x9=297) the component digits of the product when added up are still multiples of nine (2+9+7=18 and 1+8=9). If you want to know if a number is divisible by nine simply add up its digits.

A well-known method of multiplying by nine which is popular with children is that of using the fingers.

Thus if you want to multiply nine by seven you hold out your 10 fingers and put down your seventh finger. The number of fingers to the left of the seventh finger indicate the tens and those to the right indicate the units and you thus get an answer of 63.

I am convinced that since mathematics is logical and not metaphysical there must be some form of explanation to my query. I am therefore asking any maths wizard among the readers of this paper to put their brains in top gear and come up with an explanation.

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Attard.

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[7]Mario Pace's Letter: The Times, 28th Jan 1999.