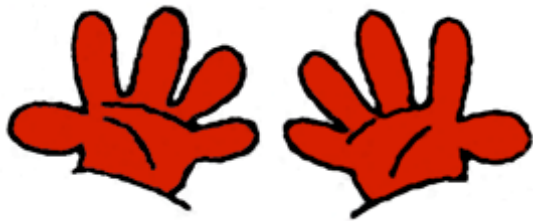




by H. Farid (www.cs.dartmouth.edu/~farid)

Once upon a time there were 10 fingers,



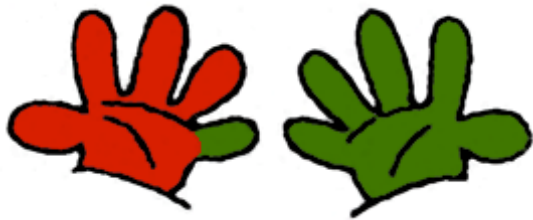
with wondrous mathematical powers.

They could count,



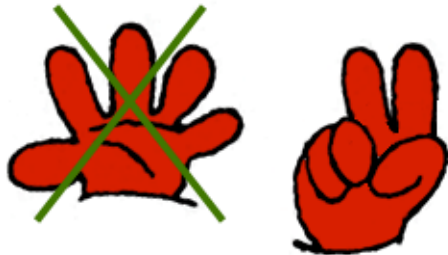
1, 2, 3, ...

add,



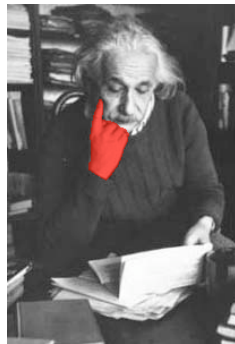
$$4 + 6 = 10$$

subtract,



$$7 - 5 = 2$$

and explore marvelous mathematical
mysteries.



$$\Delta E = \frac{h\omega}{e^{h\omega/kT} - 1} \cdot \frac{V\omega^2 \Delta\omega}{\pi^2 c^3}$$

One day the 10 fingers discovered a

dejected,
depressed,
and despondent

number nine.

9

“Why so down?”, asked the 10 fingers.



“I am just an

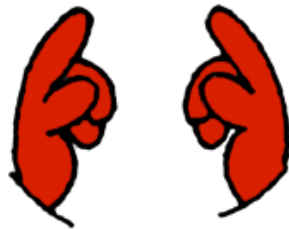
unimportant,
uninteresting,
and uninspiring

little number”, muttered the number nine.

9

“No, no, no, no, no, no, no, no, no, no”,
said all 10 fingers.

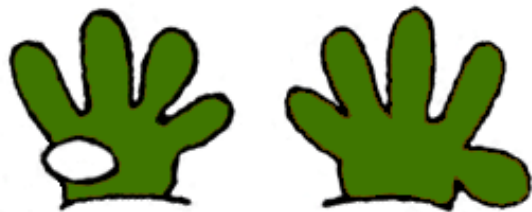
“You are a magnificent number, for even
with all of our mathematical might, it is
only with you that we can multiply.”



“Look, 9×1 ”, said the 10 fingers. As they all stood at attention, the first finger lowered itself for the remaining 9 fingers to reveal the product.

The number nine was unimpressed.

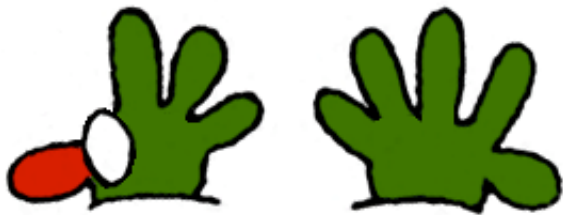
“Wait, there is more”, said the 10 fingers.



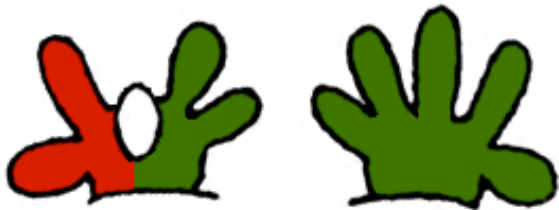
$$9 \times 1 = 9$$

This time, they put their second finger down and counted what was to the left, 1, to the right, 8, and put them together: 18

and on they went...

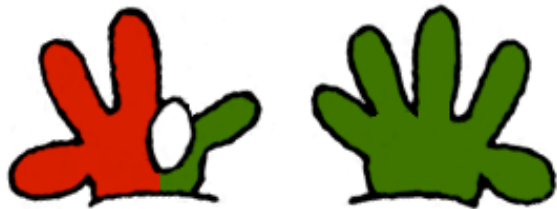


$$9 \times 2 = 18$$



$$9 \times 3 = 27$$

$$9 \times 4 = 36$$



The number nine began to perk up.

But the 10 fingers weren't done...

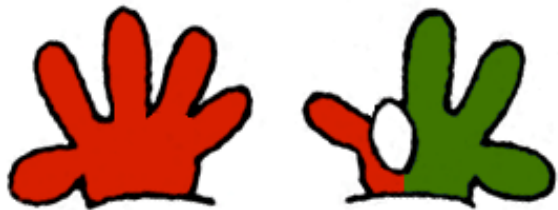




$$9 \times 5 = 45$$

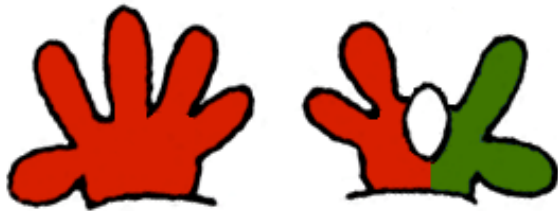
$$9 \times 6 = 54$$





$$9 \times 7 = 63$$

$$9 \times 8 = 72$$



“Hot stuff!”, cried the delighted nine.





$$9 \times 9 = 81$$

$$9 \times 10 = 90$$



The delirious number nine was on cloud,
well... nine.



The 10 fingers gathered some friends and
in a final act of of mathematical mastery
proved the

unequaled
unlimited,
and unparalleled

uniqueness of the number nine.



$$9 \times 27 = 243$$

*T*he

End
