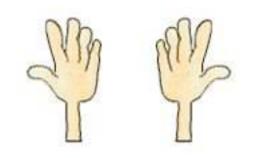
7 and 10: A Love Story of Multiplicative Proportions

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

Once upon a time there were 10 fingers,

who were in love,



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with the number seven.

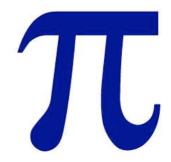


The 10 fingers were, in turn

tender, thoughtful, and tantalizing.

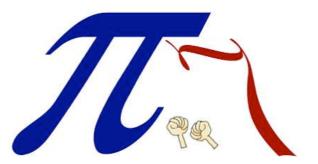


The number seven, however, only had eyes for the mathematically powerful π (*pronounced pie*).



"You are out of your league", scorned π

"You are uninteresting, uninspiring and unappealing",

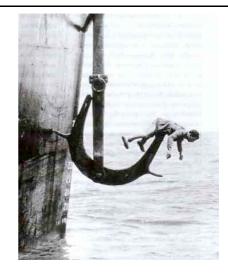


said the number seven.

Dejected, the 10 fingers became prone to bouts of tearfulness.



After months of despair,

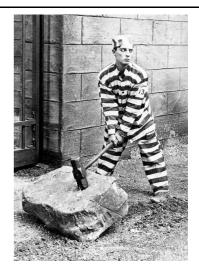


the 10 fingers resolved to impress the number seven with his own mathematical prowess.



After months of

thinking, toiling, and tinkering



the 10 fingers emerged triumphant,

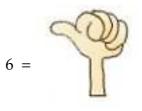
having mastered the mathematical mysteries of multiplication.

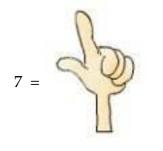


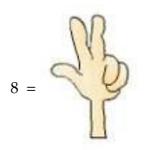
"You see", said the 10 fingers "it is really quite easy."

"I can multiply any two numbers between 6 and 10."

"To start, I'll let, on my left hand,"



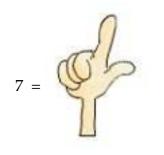


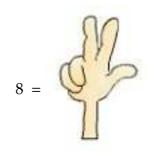


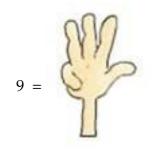


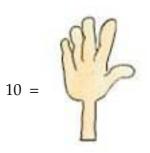
"And on my right,"





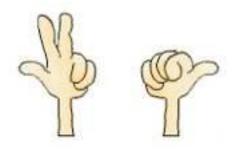






"Now, let's multiply, say, 8 by 6."

"On my left is 8 and on my right is 6."



"There are, in total, 4 fingers left standing. Multiply this number by 10 – easy, 40."

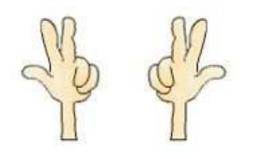
"On my left are 2 folded fingers, and on my right are 4 folded fingers. Multiply these numbers -8."

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"And now, add 40 to 8 to give 48 = 8 x 6."

"How about, 8×8 ."

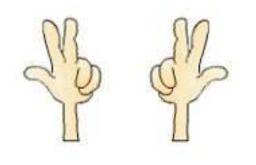
"On my left is 8 and on my right is 8."



"There are, in total, 6 fingers left standing. Multiply this number by 10 – easy, 60."

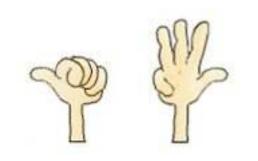
"On my left are 2 folded fingers, and on my right are 2 folded fingers. Multiply these numbers -4."

"And now, add 60 to 4 to give $64 = 8 \times 8$."



"What about 6×9 ."

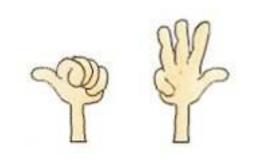
"On my left is 6 and on my right is 9."



"There are, in total, 5 fingers left standing. Multiply this number by 10 – easy, 50."

"On my left are 4 folded fingers, and on my right is 1 folded finger. Multiply these numbers – 4."

"And now, add 50 to 4 to give $54 = 6 \times 9$."

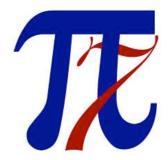


Emboldened by his new-found mathematical might,

the 10 fingers set out to win the heart of the number seven.



Watching her frolick with π , he couldn't remember, exactly, what it was that he had seen in her.



She seemed silly, slumpy, and superficial,

Her friend, the number 8, however, seemed

elegant, exciting, and eclectic.



And, the number 8 found the 10 fingers to be

sexy, smart, and sophisticated.



And so they lived, happily ever after.



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