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[> # a mathematical term is 'a' choose 'b'.
[> # imagine there are 'a' marbles, all different, and you want to know how many ways there are to
    choose 'b' of them.
[>
[> # the definition of 'a' choose 'b' is ('a factorial) divided by ( ('b factorial) times ('a minus 'b')
    factorial). end definition
[>
[> # from the help files
[> binomial(4, 2)
                                     6                                     (1)
[> #lets have some fun with this.
[> binomial(4, 3)
                                     4                                     (2)
[> 4!
                                     24                                    (3)
[>  $\frac{4!}{(3!) \cdot (4-3)!}$ ;
                                     4                                     (4)
[> 3!·1!
                                     6                                     (5)
[>  $\frac{24}{6}$ 
                                     4                                     (6)
[> # okay expression 4 had a corrected error but so far so good.
[> binomial(12, 7)
                                     792                                    (7)
[> 12!
                                     479001600                               (8)
[> 7!·(5)!
                                     604800                               (9)
[>  $\frac{479001600}{604800}$ 
                                     792                                    (10)
[> # so 792 is our new number. I used the 'ctrl C' and the 'ctrl V' key combinations for cut and
    paste.
[>
[> # good excercise. Matt C. A. 1- 6- 2017
[>

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