No: _____ Date: __/__/____

* Factorial Trailing Zeroes

1 x 2 x 3 x 4 x 5 x 6 x 7 x 8 x 9 x 10 x 11 x 12 x 13 x 14 x 15 x 16 x 17 x 18 x 19 x 20 x 21 x 22 x 23 x 24 x 25

5x1 5x2 5x3 5x4 5x5

multiple of 10 → 2x5

as the # of 2's are obviously bigger than # of 5's; we keep counting # of 5's.

take total # of 5s → $n/5$

then 25, 50, 75, 100... contains another 5 → $n/5^2$

then 125, 250... " " " " → $n/5^3$

do this till $(n/5^{\alpha} = 0)$

total # of 5's = Trailing Zeroes.