8!/e = 14832.89907

8!-(8!/1!)+( 8!/2!)-( 8!/3!)+( 8!/4!)-( 8!/5!)+( 8!/6!)-( 8!/7!) = 14832 by exclusion inclusion

14832 distinct arrangements, or derangements of 8!.

N!/e

Limit as n-> infinity of !n/n! = 1/e 0.3678794412 \* 100% = about 36%