

# 187 §3- DISCRETE MATHEMATICS - Quiz 11

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1. We distribute 8 (identical) ping-pong balls among 5 people. In how many ways can this be done? In how many ways can this be done if, in addition, each person must receive at least one ball?
2. Prove that for any positive integers  $n$  and  $m$ , the product

$$(n + 1)(n + 2) \dots (n + m)$$

is divisible by  $m!$ .