Problem 1: In how many ways can we distribute $k$ identical pieces of candy to $n$ children if each child gets at least $j$ pieces?

Problem 2: For each of the following values, state a question relating a distribution of ten textbooks to fifteen students for which the given value is the answer.

i. $\binom{15}{10}$
ii. $P(15,10)$
iii. $15^{10}$
iv. $10^{15}$

Problem 3: How many 8-digit strings contain exactly 6 different digits?

Problem 4: Consider the word *PREPOSTEROUS*. In how many ways can we rearrange the letters of that word so that $E$ is the first vowel to appear?