

InClass Exercises – Week 11

1. If $S = \{a, b, c, d, e\}$ is the set of $n = 5$ objects under consideration and $k=3$, then find all of the possible permutations of 3 elements from S .
2. An instructor has divided the class into seven groups. She wishes to have three of the groups make their presentations today.
In how many ways can she arrange the three presentations?
3. In how many ways can arrange a 3-letter code consisting of three lower case letters?
4. How many integers n with $1 \leq n \leq 1500$ have at least two distinct digits?
5. How many four-digit positive integers have a 1, 2, or 3 as their last digit?
What if we also insisted on the digits being distinct?