

1. Question — You have to solve 5 tasks in parallel and have 5 engineers at your disposal. Each engineer can only work on one task. How many possibilities are there to distribute the tasks?
2. Question — In how many ways can you arrange a card deck of 32 cards?
3. Question — You want to extend your company with two new locations. There are 5 possible spots available. However, due to the current material shortage, you can only build one office at the time. How many possibilities exist to build the two offices?
4. Question — You have 6 new features for your website and want to compare them against each other using A/B testing. How many iterations do you need to run?
5. Question — You want to find a secure password, consisting of the letters [a-z], [A-Z], and digits 0-9. Imagine a modern computer which can test 1 billion passwords a second. How many characters should your password have so that the attacker would need at least a year to guess it?