## Calculating Probability 3

You just purchased a new bicycle. You run over to Target to buy a lock with a 3-digit code.

1. If the digits are 0-9 and digits can be repeated, how many codes are possible?
2. What is the probability you get the lock with code 3-4-5?
3. What is the probability you get the lock with code 7-7-7?
4. If the digits are 0-9 and digits can't be repeated, how many codes are possible?
5. What is the probability you get the lock with code 6-0-2?
6. What is the probability you get the lock with code 8-3-3?
7. If the digits are 1-9 and digits can be repeated, how many codes are possible?
8. What is the probability you get the lock with code 9-5-5?
9. What is the probability you get the lock with code 1-4-7?
10. What is the probability you get the lock with code 6-9-0?
11. If the digits are 1-9 and digits can't be repeated, how many codes are possible?
12. What is the probability you get the lock with code 9-5-5?
13. What is the probability you get the lock with code 1-4-7?
14. What is the probability you get the lock with code 6-9-0?

You just bought a new car and need to purchase a license plate. Basic plates have 7 digits.
15. How many plate options are there if digits are $0-9$ without repetition?
16. What is the probability of receiving plate number: 1234567 ?
17. What is the probability of receiving plate number: 1133557 ?
18. What is the probability of receiving plate number: 12345678 ?
19. How many plate options are there if digits are 0-9 with repetition?
20. What is the probability of receiving plate number: 1234567 ?
21. What is the probability of receiving plate number: 1133557 ?
22. What is the probability of receiving plate number: 12345678 ?
23. How many plate options are there if all characters are letters, without repetition?
24. What is the probability of receiving plate number: ILVM ATH ?
25. What is the probability of receiving plate number: YIPPEEE ?
26. What is the probability of receiving plate number: I8TACOS ?
27. How many plate options are there if all characters are letters, with repetition?
28. What is the probability of receiving plate number: ILVM ATH ?
29. What is the probability of receiving plate number: YIPPEEE ?
30. What is the probability of receiving plate number: I8TACOS ?
31. How many plate options are there if the first 3 characters are digits $0-9$ and the last 4 are letters, without repetition?
32. What is the probability of receiving plate number: 123ABCD ?
33. What is the probability of receiving plate number: 1234567 ?
34. What is the probability of receiving plate number: 111AAAA ?
35. How many plate options are there if the first 3 characters are digits $0-9$ and the last 4 are letters, with repetition?
36. What is the probability of receiving plate number: 123ABCD ?
37. What is the probability of receiving plate number: 1234567 ?
38. What is the probability of receiving plate number: 111AAAA ?
39. How many plate options are there if the first 3 characters are digits 1-9 and the last 4 are letters, without repetition?
40. What is the probability of receiving plate number: 123ABCD ?
41. What is the probability of receiving plate number: 0123456 ?
42. What is the probability of receiving plate number: 111AAAA ?
43. How many plate options are there if the first 3 characters are digits 1-9 and the last 4 are letters, with repetition?
44. What is the probability of receiving plate number: 123ABCD ?
45. What is the probability of receiving plate number: 012 WXYZ ?
46. What is the probability of receiving plate number: 111AAAA ?
47. A license plate has 6 digits. The first 4 characters are digits $1-9$ and the last 2 are letters, with repetition. What is the probability you get plate number: 3592AX ?
48. A license plate has 6 digits. The first 2 characters are digits $0-9$ and the last 4 are letters, with repetition. What is the probability you get plate number: 32ATBX?
49. A license plate has 6 digits. The first 2 characters are digits $1-9$ and the last 4 are letters, without repetition. What is the probability you get plate number: 45PPQR ?
50. A license plate has 6 digits. The first 3 characters are digits $0-9$ and the last 3 are letters, without repetition. What is the probability you get plate number: 953ASD ?
51. A license plate has 6 digits. The first 3 characters are digits 1-9 and the last 3 are letters, without repetition. What is the probability you get plate number: 208BCD ?
51. A license plate has 8 digits. The first 3 characters are digits 1-9 and the last 5 are letters, without repetition. What is the probability you get plate number: 208ABCDE ?

