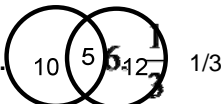


- How many 6 digit passwords can be created with numbers only that cannot repeat?
- In a club of 15, how many ways can 3 people be chosen to represent their club?
- When rolling two dice, what is the probability of rolling a sum that is a multiple of 3 or a sum greater than 8?
- How many ways can you arrange the letters of MONTANA?
- What is the probability of rolling a multiple of 3 on a die and then flipping a tails?
- There are 15 members on the ski team and 17 members in Key Club. There are 5 members in both clubs. What is the probability that you will random select a member that is in both clubs given that the member is on the ski team?
- How many integers from 1-720 are divisible by 2 or 3? What is the probability that you will choose a number that is NOT divisible by 2 or 3?
- There are 6 Baby Ruth and 8 Snickers bars in a dish. What is the probability that you will choose 2 Baby Ruth and 3 Snickers if you grab 5 bars at once?

**WORK:**

Answers:

1. 151,200      2. 455      3.  $\frac{17}{36}$       4. 1260

5.  $\frac{1}{6}$       6.   $\frac{1}{3}$       7.  $480; \frac{1}{3}$       8.  $\frac{60}{143}$

	1	2	3	4	5	6
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11
6	7	8	9	10	11	12