

Name:

Neptun ID:

Date:

Midterm Test Example

1. We have 12 books on the shelf. How many ways can the books be arranged on the shelf if 3 particular books must to be next to each other
 - a. if the order of the three books does not count?
 - b. if the order of the three books does count?
2. Two fair dice are thrown. Find the probability that the sum of the numbers obtained is 8.
3. On a rectangular target with sides of one meter lengths each a circle is drawn with radius of 0.5 meter. Find the probability that a random shot (given it hits the target) hits the target outside the circle.
4. Two dice are rolled. Find the probability that the sum of the numbers obtained is 7 given the sum is odd.
5. Two lottery coupons (5 from 90) are filled independently of each other. What is the probability of winning, i.e. of hitting at least two winning numbers?