

Module 2: Assignment (edureka)

Task 1: What is the probability of getting a 2 or a 5 when a die is rolled?

→ The probability of getting a 2 when a die is rolled is $= 1/6$

→ The probability of getting a 5 when a die is rolled is $= 1/6$

Task 2: Consider a pack contains 4 blue, 2 red and 3 black pens. If a pen is drawn at random from the pack, replaced and the process repeated 2 more times, what is the probability of drawing 2 blue pens and 1 black pen?

→ No of blue pens = 4

No of red pens = 2

No of black pens 3

Probability of getting 2 blue and 1 black is $= 4/9 * 4/9 * 3/9 = 0.065$

Task 3: When two dice are rolled, find the probability of getting a greater number on the first die than the one on the second, given that the sum should equal 8

→ for sum to be 8 there are 5 possibilities: (2,6), (3,5), (4,4), (5,3), and (6,2)

But as per the condition first die has to have a greater number so the possible outcomes would be (5,3), and (6,2). So the probability is $2/5 = 0.4$