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Winter 2020 Assignment 2

**COMP 233 Assignment 2 Solution**

**Question 1** if and . Calculate the following:

**Question 2:**

1. Find the marginal probability:

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1 | 2 | Total |
| 0 |  |  |  |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| Total |  |  | 1 |

1. Find:

**Question 3:**

**Question 4:**

1. , However, we know that and . Hence:

**Question 5:**

The chance to get 0 cold per year with :

The chance to get 0 cold per year with :

Let D denote “Drug is beneficial” and N “has 0 cold in the year”:

**Question 6:**

We have ,

To get the probability for 2 weeks:

1. , Where

Now we have:

follows a where

Which means that

**Question 7:**

Percentage of bolt no meeting requirement

Now we can find which is equal to

**Question 8:**