Test due Aug 11, 2021 17:00 CEST

Part 1

6/6 points (graded)

A small construction crew in northwestern Canada is about to start road work on a mining road. Victor Phillips is the operations lead. He believes that the work is not too difficult and it will only take one day. Since this road is in a pretty remote area, not many vehicles drive on it. The amount of daily traffic follows a uniform distribution with daily vehicles ranging from 2 to 20.

Given this discrete uniform distribution, what is the probability that the number of cars stopped by this construction will be 3 or 4?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.105

0.105

What is the probability that the construction crew will stop less than 6 cars?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.211

0.211

Submit	You have used 1 of 15 attempts

Correct (6/6 points)

Part 2

4/4 points (graded)

Another construction crew in northern Canada, led by Lawrence Rivera, is about to start road work on a logging road. Being minor, their work will only take a single day. Since this road is far from civilization, not many vehicles drive on it. The amount of daily traffic follows a poisson distribution with $\lambda = 6.2$.

Given this Poisson distribution, what is the probability that the number of cars stopped by this construction will be 4?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.125

0.125

What is the probability that the construction crew will stop more than 5 cars?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.586

0.586

| Submit | You have used 1 of 15 attempts |

Correct (4/4 points)

Par

t 3

4/4 points (graded)

Albert Cox is leading a third small construction crew in northeastern Canada which is about to start road work on a road that connects two small fishing villages. Being minor, their work will only take one day. Since this road is in a remote area, not many vehicles drive on it. The amount of daily traffic follows the following distribution.

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Number of Drivers              Probability
----------------------------------------------------------
      1                                    0.203
      2                                    0.229
      3                                    0.238
      4                                    0.208
      5                                    0.122
```

Given this distribution, what is the probability that the number of cars stopped by this construction will be 2 or 4?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.437

0.437

What is the probability that the construction crew will stop more than 2 cars?

Enter your answer in decimal form using three decimal places. For example, if your answer is 23.24%, you should enter .232 in the box below.

0.568

0.568

Submit