Graded Assignment 2 - Road Work

Part 1

3/3 points (graded)

A small construction crew in northwestern Canada is about to start road work on a mining road. 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 4 to 13.

Given this discrete uniform distribution, what is the probability that the number of cars stopped by this construction will be 9 or 10?
Enter your answer in decimal form rounded to the third decimal place. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.2 ✔

0.2

What is the probability that the construction crew will stop less than 7 cars?
Round to three decimal places. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.3 ✔

0.3

Submit You have used 1 of 2 attempts

✔ Correct (3/3 points)

Part 2

2/2 points (graded)

Another construction crew in northern Canada 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 $\lambda = 5$.

Given this Poisson distribution, what is the probability that the number of cars stopped by this construction will be 5?

Enter your answer in decimal form rounded to the third decimal place. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.1754674 ✔

0.1754674

What is the probability that the construction crew will stop more than 4 cars?
Round to three decimal places. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.5595067 ✔

0.5595067

Submit You have used 1 of 2 attempts

✔ Correct (2/2 points)

Part 3

2/2 points (graded)
A third small construction crew in northeastern Canada 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.

Number of Drivers	Probability
1	0.221
2	0.18
3	0.22
4	0.201
5	0.178

Given this distribution, what is the probability that the number of cars stopped by this construction will be 3 or 5?
Enter your answer in decimal form rounded to the third decimal place. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.398 ✔

0.398

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

Round to three decimal places. For example if your answer is 23.2453, you should enter 23.245 in the box below.

0.599 ✔

0.599

Submit You have used 1 of 2 attempts

✔ Correct (2/2 points)