

<u>Course</u> > <u>Module 2 : Basic Pr...</u> > <u>Law of Total Proba...</u> > Homework

## Homework

Please answer the following questions. Be sure that you have downloaded the associated Excel file before beginning the homework. This lesson uses the **JulyBayesHW.xlsx** file.

Remember that homework counts for 20% of your final grade. You are allowed **unlimited** attempts per question for homework problems. The main goal of homework is for you to practice and learn how to apply what you've learned in the content without worrying about getting the problem right the first time. Some homework problems may also provide hints or advice. Have fun!

## M2L5HW1

1/1 point (graded)

A company has a plant in Houston and Dallas. 70% of the employees work in Houston, and 30% work in Dallas. Each year 3% of the Houston employees are involved in an accident, and 5% of the Dallas employees are involved in an accident.

If you randomly choose an employee who had an accident last year, what is the probability that they work in Houston?

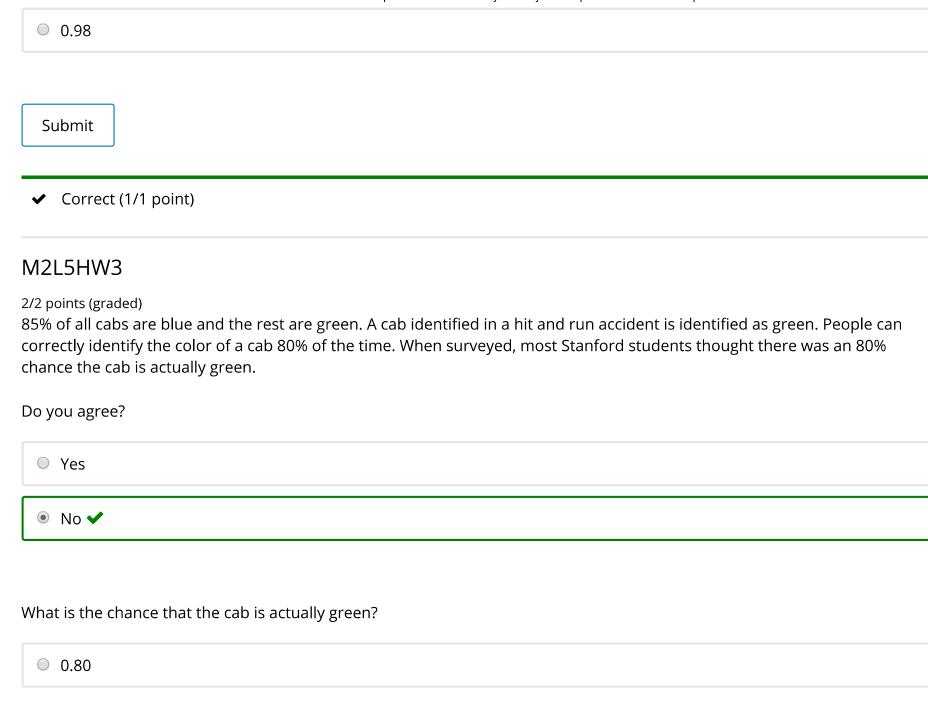
0.15

0.21

● 0.05

0.20

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0.44	
● 0.58 ✔	
Submit	
✓ Correct (1/1 point)	
M2L5HW2	
	people are liars. Also suppose a lie detector test is 98% accurate. That is, if a person is lying, there is a indicate that they are lying. Also, if the person is NOT lying, there is a 98% chance the test will DT lying.
If the lie detector test ind	licates the person is lying, what is the probability that the person is lying?
0.02	



● 0.41 ✔			
0.15			
0.52			
Submit			

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