

**Problem Wk.11.2: Nano Quiz****Due date: 4/21, 9:50am**

Do all parts of this problem and then click Submit. There is only one Submit button, you should only do that when you are finished with all the parts of the problem.

**Do not try to start another log in, you will lose what you typed.**

**There is a limited checking budget (12 checks) on this quiz.**

**You have 15 minutes.** You must click submit before:

4/19/2011, 2:36pm

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**Part 1: Probability**

- o Let R0 be true if it rained yesterday or false if it did not rain yesterday.
- o Let R1 be true if it rains today or false if it does not rain today.
- o Let R2 be true if it rains tomorrow or false if it does not rain tomorrow.

Consider the following table of probabilities:

	R1=true	R1=false
R0=true	0.06	0.14
R0=false	0.09	0.71

1. What is the probability that it rained yesterday:
2. What is the probability that it rained either yesterday or today or both?
3. What is the probability that it will rain today given that it rained yesterday?
4. What is the probability that it rained yesterday given that it rained today?
5. Assume that R0 and R1 are related as given in the table above, and that  $\Pr(R2=\text{true} \mid R1=\text{true}) = 0.3$  and  $\Pr(R2=\text{false} \mid R1=\text{false}) = 0.9$ .  
What is the probability that it will rain tomorrow given that it rained yesterday?

8 checks left

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**Part 2: Enable Submit**

Current time is: **5/15/2011, 4:10pm**

Click Submit before: **4/19/2011, 2:36pm**

**Enter Done below**

**and click Submit.**

**If this problem is submitted past the due time, this subproblem will be marked incorrect.**

8 checks left

**This is a multi-part problem, each part has its own Save and Check buttons but there is ONLY ONE Submit button for the WHOLE problem. Finish working on all the parts before you click on Submit.**

When you are finished with the problem...



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