## INTRODUCTION TO PROBABILITY MODELS

Lecture 10

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## REVIEW EXAMPLE 1 OF LECTURE 7

After the first exam, a student will go to the beach (event B) depending on whether they pass the exam (event A). The probability a student will pass is 0.9. If a student passes, they go to the beach with a probability of 0.8. However, a student who fails the exam will only go to the beach with a probability of 0.4.

- 1. What is the probability that a student went to the beach?
- 2. What is the probability that a student at the beach passed the test?
- 3. What is the probability that a student not at the beach failed the test?
- 4. Is going to the beach independent of whether the student passed the exam?

## TIME FOR QUIZ