Stat 140 - Quiz 4

What's Your Name? _____

Intuitive Meanings

1) Write a sentence or two describing what it means for two events to be *independent*. You may not use the word "conditional" and you may not use any formulas.

2) What a sentence or two describing what it means for two events to be *disjoint*. You may not use any formulas.

Tree Diseases

The probability that a tree has root rot is 0.07, and the probability that it has bark disease is 0.04. The probability that it has both diseases is 0.001.

Let A be the event that a randomly selected tree has root rot and B be the event that it has bark disease.

3) Are the events A and B independent? Justify your answer, and show enough detail that I know you know what you're talking about.

4) Are the events A and B disjoint? Justify your answer, and show enough detail that I know you know what you're talking about.