

CSCE 582 Spring 2016

QUIZ 1

Assigned Tuesday, 16-01-12

This is exercise 1.1 in [J01].

To illustrate that simple rules cannot cope with uncertainty reasoning, consider the following two cases:

1. I have an urn with a red ball and a white ball in it. If I add a red ball and shake it, what is the certainty of drawing a red ball in one draw? If I add a white ball instead, what is the certainty of drawing a red ball? If I combine the two actions, what is the certainty of drawing a red ball?

Answer: two thirds, one third, one half.

2. When shooting, I am more certain to hit the target if I close the left eye. I am also more certain to hit the target if I close the right eye. What is the combined certainty if I do both?

Answer: close to zero.