The government is attempting to determine whether immigrants should be tested for a contagious disease. Let's assume that the decision will be made on a financial basis.

Assume that each immigrant who is allowed into the country and has the disease costs the U.S. $100,000, and each immigrant who enters and does not have the disease will contribute $10,000 to the national economy. Assume that 10% of all potential immigrants have the disease.

The government may
- admit all immigrants,
- admit no immigrants, or
- test immigrants for the disease before determining whether they should be admitted.

It costs $100 to test a person for the disease; the test result is either positive or negative. If the test result is positive, the person definitely has the disease. However, 20% of all people who do have the disease test negative. A person who does not have the disease always tests negative.

The government's goal is to maximize (per potential immigrant) expected benefits minus expected costs. Use a decision tree to aid in this undertaking. Also determine EVSI and EVPI.