One Sunday evening the secluded monks gathered for evening prayers. The high priest said, "I have a grave announcement. Some of you have acquired a deadly disease. I know this because the disease produces a purple spot on your forehead, and I can see that some of you have this. You will remain unharmed for 14 days. After which, the disease will spread to others, and you will experience a most painful death. If we are not careful, this disease will completely destroy our peaceful monastery. Therefore, I ask that those of you who have the spot to remove yourself from our community within two weeks. All of you have taken a vow of silence, and a vow of humility, and thus will not be able to inform one another of the forehead spot, and even though we lack mirrors and the lake is choppy and you are unable to see whether you have this spot, you are all trained in logic and will be able to deduce on your own whether or not you have become infected. We will now carry on as we always have. You will work in solitude all morning and congregate here every evening. Some of you would prefer that I simply point out those of you who are diseased and while I have not taken the yow of silence that you have taken, my vow of humility prevents me from calling attention to your dysfunctions. Good night"

The next few days passed. The infected monks seemed as good natured as the others, and no one treated another any differently. However, as the two week deadline approached, nervousness crept in. The second Saturday after the high priest's announcement was tense. The next day marked the two week deadline before the disease was to spread, and the diseased monks were still working and praying along side the healthy ones. After the congregation disbanded from Saturday evening prayers, the monks returned to their private quarters. On Sunday, two weeks after the high priest announcement, all of the diseased monks were gone. Through their highly tuned logic skills, they were able to determine that they had been affected and removed themselves.

How many monks were infected? And how did they determine it?