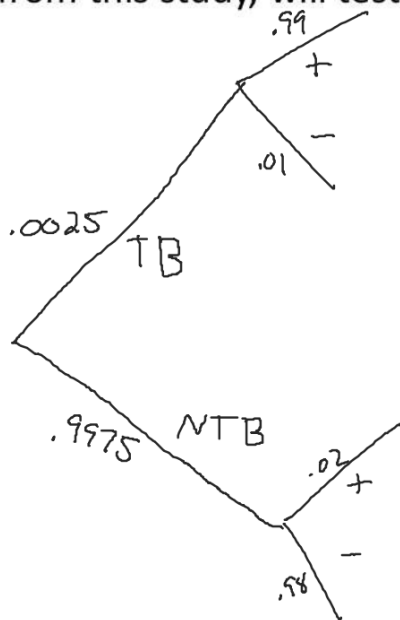At fast-food business 60% of business is done via the drive-through window. Register data reveals that 70% of the transactions at the drive-through window are via credit/debit cards, while 80% of the transactions at the counter are via credit/debit cards. What is the probability that a customer is selected at random used cash at the counter?

Tuberculosis is becoming a rare disease. 0.25% of the population has Tuberculosis. On a patient with Tuberculosis, a positive result is returned with probability 99%. On a patient without Tuberculosis, a negative result is returned with a probability of 98%. What is the probability that a randomly selected person, from this study, will test negative for Tuberculosis?

$$(H)(-) + (NH)(-)$$

$$(.0025)(.01) + (.9975)(.98)$$

$$.0125 + .97$$

$$.9775$$

.99
+

.01
−

.0025
TB

.9975   NTB

.02
+

.98
−