

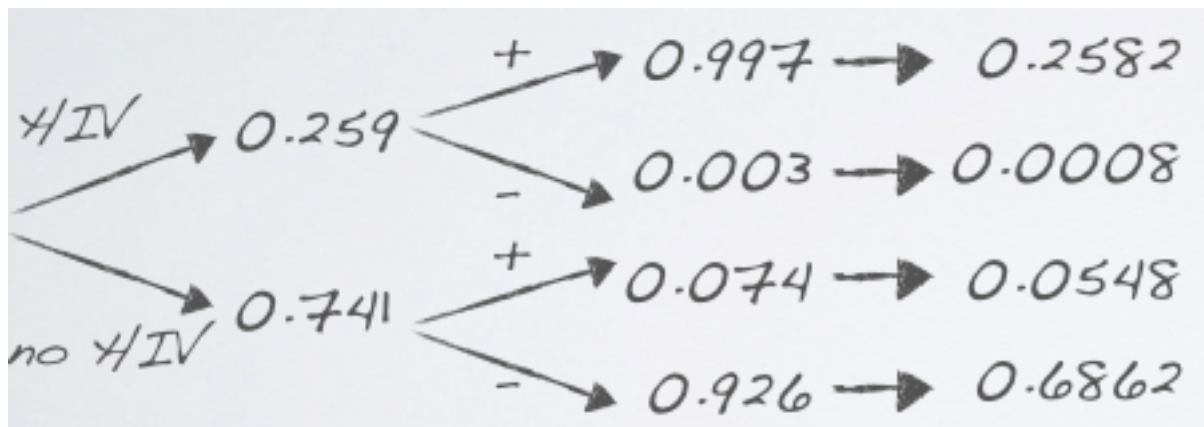
In-Video Quiz Questions for  
Unit 2: Part 2 – (2) Probability Trees

(04:32)

1. Is the accuracy of the test dependent on or independent of whether the patient has the disease?  
(a) Dependent  
(b) Independent

(10:31)

2. Given the probability tree below, what is the probability that a randomly chosen person from Swaziland tests negative?



- (a)  $0.003 + 0.926 = 0.929$
- (b)  $0.0008 + 0.6862 = 0.687$
- (c)  $0.0008 / (0.0008 + 0.6862) \approx 0.0012$
- (d)  $0.6862 / (0.0008 + 0.6862) \approx 0.9988$
- (e)  $0.2582 + 0.0548 = 0.313$

**Answers:**

1. a

*Explanation:*  $P(+ | \text{HIV}) \neq P(+ | \text{no HIV})$

2. b

*Explanation:*  $P(-) = P(\text{HIV and } -) + P(\text{no HIV and } -) = 0.0008 + 0.6862 = 0.687$