

In-Video Quiz Questions for  
Unit 3: Part 5 – (2) Significance vs. Confidence Level

**(04:33) – slide 3, after “So, for the most part, if you have the given significance level and you have accurately determined the equivalent confidence level, the results from the two approaches should always equal agree with each other.”**

1. What is the confidence level required for a confidence interval to be equivalent to a one sided hypothesis test with 10% significance level?

- (a) 95%
- (b) 80%
- (c) 90%
- (d) 98%

**(06:03) – slide 4, after “This variable takes on the levels very high, high, medium, and low human development.”**

2. A 95% confidence interval for the average waiting time at an emergency room is (128 minutes, 147 minutes). Which of the following is false?

- (a) A hypothesis test of  $H_A : \mu \neq 120$  min at  $\alpha = 0.05$  is equivalent to this CI.
- (b) A hypothesis test of  $H_A : \mu > 120$  min at  $\alpha = 0.025$  is equivalent to this CI.
- (c) This interval does not support the claim that the average wait time is 120 minutes.
- (d) The claim that the average wait time is 120 minutes would not be rejected using a 90% confidence interval.

**Answers:**

1. b
2. d