

UTAustinX: UT.7.20x Foundations of Data Analysis - Part 2



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Readings

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Question 2

When crossing white and yellow summer squash, a genetic model predicts that 75% of resulting offspring will be white, 15% will be yellow and 10% will be green.

Below are the results from an experiment run on a random sample of 205 squash offspring.

Color	White	Yellow	Green
Number of Offspring	152	39	14

(1/1 point)

2a. Which method should we use to test if these data are consistent with the ratio of offspring colors predicted by the genetic model?

Chi Square Goodness of Fit Test



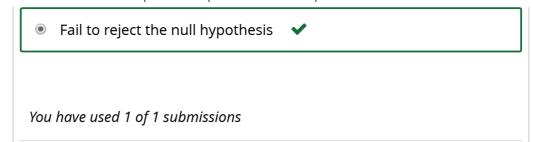
- Chi Square Test of Independence
- Single Sample t-test
- Independent Samples t-test

You have used 1 of 1 submissions

(1/1 point)

Reading Check due May 03, 2016 at 17:00 UTC	2b. What is the expected count of white offspring? (Round to 2 decimal places.)
Lecture Videos Comprehension Check due May 03, 2016 at 17:00 UTC	153.75 ✓ Answer: 153.75
R Tutorial Videos	153.75
Pre-Lab Pre-Lab due May 03, 2016 at 17:00 UTC	You have used 1 of 1 submissions
Lab Lab due May 03, 2016 at 17:00 UTC Problem Set Problem Set due May 03, 2016 at 17:00 UT	(1/1 point) 2c. What is the expected count of yellow offspring? (Round to 2 decimal places.)
	30.75
	Answer: 30.75
	30.75
	You have used 1 of 1 submissions
	(1/1 point) 2d. What is the expected count of green offspring? (Round to 2 decimal places.)
	20.50
	20.50
	You have used 1 of 1 submissions
	(1/1 point) 2e. Is the sample size condition met?
	● Yes ✔
	O No

You have used 1 of 1 submissions
(1/1 point) 2f. What are the degrees of freedom and the critical value for this test, assuming a = 0.05?
Degrees of Freedom
2
Answer: 2
You have used 1 of 1 submissions
(1/1 point) Critical Value for alpha=.05: (Round to 2 decimal places.)
5.99
Answer: 5.99
5.99
You have used 1 of 1 submissions
(1/1 point) 2g. What is the Chi Square statistic for this test? (Round to 2 decimal places.)
4.29
Answer: 4.29
4.29
You have used 1 of 1 submissions
(1/1 point) 2h. What is the appropriate outcome for this hypothesis test?
Reject the null hypothesis



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