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

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# Question 4

A telephone survey asked a random sample of Indiana voters about their home internet usage, as well as what type of community (rural, suburban or urban) they lived in.

Of the 123 survey respondents, 28 were from rural areas, 42 were from suburban areas, and 53 were from urban areas.  Thirteen rural respondents, 35 suburban respondents, and 50 urban respondents said they had access to internet at home.

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(1/1 point)
4a. What is the appropriate null hypothesis for this test?

◉  Home internet access and community type are independent.  ✔

○  Home internet access and community type are not independent.

*You have used 1 of 1 submissions*

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(1 point possible)
4b. What proportion of respondents **had** internet access at home? *(Round to 3 decimal places.)*

0.464    ✗

**Answer:** 0.797

0.464

*You have used 1 of 1 submissions*

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(1/1 point)

4c. What proportion of respondents **did NOT have** internet access at home? *(Round to 3 decimal places.)*

0.203    ✓

**Answer:** 0.203

0.203

*You have used 1 of 1 submissions*

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(1/1 point)

4d. How many **rural** residents would we **expect to have** home internet? Please use a rounded proportion you calculated above. *(Round to 2 decimal places.)*

22.31    ✓

**Answer:** 22.32

22.31

*You have used 1 of 1 submissions*

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(1/1 point)

4e. How many **urban** residents would we **expect NOT to have** home internet? Please use a rounded proportion you calculated above. *(Round to 2 decimal places.)*

10.77    ✓

**Answer:** 10.76

10.77

*You have used 1 of 1 submissions*

(1 point possible)

4f. Does this data provide sufficient evidence that internet access at home depends on what type of community the Indiana voters live in?

○ Yes ✔

◉ No ✘

*You have used 1 of 1 submissions*

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