

,Stat 130, fall 2020

Midterm - Part B

Write your name at the top right corner on the first page
of your answer.

Due on November 15. Total Points = 10.

Please **type** your answer.

Please e-mail your answer in PDF format to
subir.ghosh@ucr.edu

Rules of the Midterm:

1. Open books and open notes.
2. Do not consult with anyone, not even your classmates.
3. Please do not ask the instructor or TA about the answers.
4. Please answer independently.

Question 1. Points = $(2 + 2) + (2 + 2) = 8$.

Please view the four videos, two each in Groups 1 and 2. Summarize the content of each video in bullet forms.

Group I:

<https://www.pewresearch.org/fact-tank/2017/05/12/methods-101-random-sampling/>

<https://www.pewresearch.org/fact-tank/2018/08/06/what-are-nonprobability-surveys/>

Group II:

https://www.youtube.com/watch?v=TtcCvy-CKLc&feature=emb_rel_end

<https://www.youtube.com/watch?v=Jd-KqGDaj3o>

Question 2. Points = 2.

From a population of 10,000 adults of a community, a simple random sample of 100 adults is selected without replacement.

What is the chance of two population members, Bob and Fran, to be included in the sample?

Present the formula and calculate its numerical value by the R program. Copy and paste the R output with your answer.