

case studies think-pair-share
Dr. Sarah's MAT 1010: Introduction to Mathematics

Part A: Answer all six questions below and post your responses and any questions you have on ASU Learn in the case studies think-pair-share forum. Add a new discussion topic with the subject as your preferred name and the post as your responses.

Part B: Respond separately to at least two of your classmates postings in a meaningful way. Use their preferred name, with something new that justifies your position on (at least) one of the questions. Don't just say, "Yeah, I agree." Instead, say, "Yes preferred name, but we also need to consider..." Or, "Preferred name, I don't agree because..." You might also pose questions, answer questions, extend ideas, or compare and contrast your responses and summarize what you chose and why.

1. Which did you find most compelling about the "price of life" readings on deciding personal and private policy?
 - unintended consequences of HIV testing the entire US population
 - consequences of raising plane tickets to improve air traffic safety versus car accident statistics
 - costs per life saved of asbestos removal versus pap smears
 - poverty and lack of education can lead to reduced options/poorer decisions regarding personal health (and correlation to an earlier death)
 - personal risk—"weight, exercise, sex, drugs, smoking, and investments"
2. A retail version of OraQuick costs \$30 and gives results in about 20 to 40 minutes. About half of US states test every inmate for HIV on admission or during incarceration. Voluntary testing programs are often ineffective because prisoners do not want to admit to high-risk behaviors. Given this and your statistical analyses from the case studies turn in assignment, consider whether we should support mandatory HIV testing of newly admitted prison inmates, as you **respond to all of these**:
 - 2a) Summarize what you believe is the strongest argument from the "yes" side
 - 2b) Summarize what you believe is the strongest argument from the "no" side
 - 2c) What do you think—yes or no?
3. In *The Heart of Mathematics*, on pp. 663–664 choose one to complete: amazing stats #15 or internet askew #18, and then respond as below:

If you selected #15, post the following:

- a) List "15" (so your classmates know which problem you selected)
- b) What is the question you asked?
- c) What is the sample population you targeted and the sample size?
- d) What is the dubious conclusion?
- e) How could one reduce bias in this instance?

If you selected #18, post the following:

- a) List "18" (so your classmates know which problem you selected)
- b) List the title or topic and provide the source
- c) Summarize the graph
- d) Is there distortion or bias? Explain.
- e) How could one reduce bias in this instance?

4. What is the title of the Gallup Poll which you analyzed in the hand in assignment (and has a Survey Methods section that includes a margin of sampling error %).
5. Name at least one item from your Gallup Poll that you found interesting or surprising, or that you had a question on.
6. Find a recent article that is *not* on Gallup and that is related to our class material (like false positive and false negatives, margin of error, or similar). You could try <https://news.google.com/> for example. List the title of the article and a link for it.