

9.1 – 9.2 Workday

ANSWER KEY

1. Does not make sense. A sample is a subset of the population and therefore cannot be larger
2. Makes sense. If results are derived from interviews, the interviewer should also be blind, so they do not inadvertently bring any bias into the interview and therefore hinder the results.
3. Does not make sense. The control group should not receive a different treatment, they should receive NO treatment through a placebo.
4. Makes sense. Although the poll with the margin of error indicates they would get a majority vote, the poll is still just a prediction, it is not a guarantee of what will happen.
5. Population: All Americans
Parameters: opinions of Americans on Iran
Sample: set of 1000 Americans surveyed
Stats: opinions of those surveyed
6. Population: All Americans
Parameters: % of Americans who believe there has been progress towards curing cancer.
Sample: 998 people surveyed
Stats: 6 in 10 people believe there has been progress towards curing cancer.
7. Population: 1.4 million college freshmen
Parameters: attitudes of first-year students
Sample: 240,000 first year students surveyed
Stats: attitudes of those surveyed
8. Those is a single dormitory will be influenced by culture of that particular dorm.
9. Those majoring in public health will be more educated on health and likely have better habits.
10. Those in sports will be influenced by the fitness needs of their sport.
11. Best Representative Sample
12. Systematic Sampling
13. Simple Random Sampling
14. Stratified Sampling
15. Convenience Sampling
16. This is an observational study with case-control because no outcomes are being affected by a “treatment” but 2 different groups are still being compared. Members are CHOOSING to do the activity that puts them into one group or the other.
17. This is an observational study with NO case-control because you are simply observing and recording results.
18. An experiment would be best with partial single-blind. Recruit people to participate and ask one group to use magnet therapy, on group to use aspirin, and one group to receive a placebo. Obviously, the people in the magnet therapy would know what group they are in, but members should not know whether they are receiving aspirin or the placebo.

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19. An observational study would be enough to measure which airlines have lowest percentage of delays.
20. An observational study would be enough to record all linemen's weights and find averages.
21. An experiment would be best with single-blind. Give each group a different brand of repellent and one group a placebo. Because the experiment is based around bugs and not people, the results cannot be affected by experimenters.
22. An experiment would be best with double-blind. Give one group a multivitamin every day and another group a placebo every day. Because the experimenters will be interacting with people it should be a double-blind so the results are not affected.