**Question 21.1**

“We sent reporters Debbie Jones to Springfield, Mall to find out what Springfield residents think about town council’s proposed legislation for renaming the public library in honor of the late Mayor Jackson McCarthy. We’ll have Debbie’s report on the 11:00 P.M. newscast.” Comment on the creditability of this “research.”

**ANSWER**

There are several problems with collecting data in this way. Two that pop to mind immediately are the representativeness of the sample and the demand characteristics. I'll address each in turn.
 By going to a mall and asking people what they think on an issue, there is absolutely no guarantee that the people you sample will be at all representative (overall similar) to the population of the town. You're not accessing people who don't go to the mall, you're not accessing people who don't choose to speak with the reporter, you're not accessing people who work during the hours you were there. This could lead to a very biased report on the townspeople's opinions on the matter.
 Additionally, having people speak with a reporter one-on-one, knowing their answers may be shown on TV could make them answer in a way that they think is socially desirable, but doesn't necessarily reflect their true opinion on the matter. People are much more likely to be truthful about their opinions when they are assured that their response will be kept anonymous. This is the issue of demand characteristics, and again, it could substantially bias your results.

**Question 21.2**

 The response to the President’s state-of-the-nation address was overwhelmingly positive. “The White House switchboard received 1532 calls supporting his views and only 122 that were opposed.” Comment on this situation and the results.

**ANSWER**
 Since people have to call in to the switchboard, it is not a random sample of individuals.  People how are more prone to call will call, while those who would never call did not.  This causes our sample to be bias.  To make generalized statements that can be used to make decisions, you need to be dealing with a large, random sample of people.
 Maybe in this case, there could have been thousands more who opposed the address, and they are taking other measures to express this dissatisfaction.  Maybe they called their local politicians.  Maybe they wrote letters, or sent emails.  If we were to base our conclusions on this piece of info, we might be making mistakes.  As well, the 1532 people who supported the address are the more vocal people.
 I highly doubt that those who thought the address was 'ok' called in to vocalize their opinion.  But where to the group of people who are 'ok' with the address fit in to this statistic?
 What we would need to do is randomly call 1654 people, and ask them their opinion on the address.  This way we get a random, unbiased sample of people to inform us of their opinions.  This will be the only way that we can make clear decisions that can be used to generalize to the public.  Basing future decisions on this biased sample would be not only wrong, but might cause the President to take a wrong direction, or make decisions that are not going to be widely supported.

**Question 21.11**

 “Polls where we can call a 900 number and express our opinion are interesting and entertaining, and we can even call as many times as we want. Besides, a democracy couldn’t work if our leaders didn’t know what we think about important issues, and these polls give us a chance to let them know what’s going on down here at the ‘grass roots.” Comment on this statement.

**ANSWER**

 The fact that you have to pay for a 900 number is one major biasing point. People who have strong opinions that they want to be heard will be willing to pay the money to call the 900 number.  Ordinary people who are satisfied or who are enjoying the status quo will probably not call in these numbers.
 Second, the fact that we can call the numbers more then once also created bias.  If you have the same person reporting the same issue, you will artificially make this issue seem more important than it is.  For it to be something that should be looked into, then many people (who are not related in anyway) need to call in and express their opinions on the same issue.
 If you want to understand what is going on, it is best to randomly select a sample of at least 30 people, and ask them their opinions.  Since the sample is random, we are likely to get rid of many of the biasing issues discussed above).  Then, if we look at these people's answers, we can look for trends and opinions.  Then anything discovered is more 'real', and could then merit the resources that are needed to probe further.  This is the scientific way to investigating issues in society.