

IM 11-12 Assignment Due Friday by 8 AM. Write your responses on another sheet of paper. Use complete sentences and check your spelling (yes that is correct, writing in math class)

- 1.1 Some television programs offer their audiences a chance to express opinions on everything from favorite rock videos to favorite presidential candidates. Viewers typically dial a phone number to register their votes. Is such a survey biased? If so, describe the biases that might exist. If not, explain why not.
- 1.2 To help determine consumer preferences, an electronics company conducts a poll in a shopping mall. The pollsters stand outside a department store and ask all the people who pass by if they own a videocassette recorder (VCR). Describe any biases this sample might contain.
- 1.3 In 1936, incumbent Franklin Delano Roosevelt was campaigning against Alf Landon for the presidency of the United States. Shortly before the election, pollsters for the *Literary Digest* conducted a survey. They sent postcard ballots to people selected at random from a list of automobile registrations and from a telephone directory. Their results indicated that Landon would win the election. That prediction was incorrect. In a landslide victory, Franklin Roosevelt won all but two states—Maine and Vermont.
- What biases in the poll may have caused the incorrect prediction?
 - How might the pollsters have obtained a more accurate picture of the nation's preferences?
- 1.4 According to pollster George Gallup, "Nothing is so difficult, nor so important, as the selection and wording of questions." In fact, poor word choice and misleading questions have biased many surveys. Write a survey question that introduces bias due to its own wording and explain the cause of that bias.