**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Data Interpretation Review Key**

*Scenario: 25 students, out of a school of 800, were surveyed about their thoughts on the news website’s commenting policy. They were asked 10 different questions, and a few samples of their answers are as follows.*

1. Do you believe that our website commenting policy is fair?

Yes — 7 No — 4 I don’t know — 14

2. Have you ever left a comment on our website?

Yes — 1 No — 11 I’ve never been to the website — 13

3. On a scale of 1-10, how important do you believe a commenting policy is?

Answer set = {1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 5, 5, 5, 5, 6, 6, 7, 8, 10, 10}

4. Do you often leave comments when using social media (Facebook, Twitter, Instagram, Pinterest, Vine, Tumblr, etc.)?

Yes — 20 No — 3 I don’t use social media — 2

***Data Interpretation Questions***

1. Calculate the percentage of students who …

* Believe the website commenting policy is UNFAIR

4/25 = 0.16 x 100 = 16%

* Have never been to the website

13/25 = 0.52 x 100 = 52%

* Use social media

(20+3)/25 = 23/25 = 0.80 = 92%

2. Calculate the mean, median and mode for the answer set in question #3.

{1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 5, 5, 5, 5, 6, 6, 7, 8, 10, 10}

Mean = 4.08

Median = 3

Mode = 3

3. Describe 2-3 weaknesses of this survey.

Possible answers include:

* The sample size is too small
* Questions 1 and 3 could be better written to eliminate bias
* Unclear if the selection reflects the true population of students who interact with the publication; how were the students chosen?

4. One of your fellow students looks at the data and states, “We should adopt Facebook’s commenting policy. Let’s look it up.”

Explain why this is an incorrect, though tempting, conclusion based on common errors in survey analysis.

Possible answers include:

* There is a lack of correlation between the social media commenting question and the students’ views on the fairness or unfairness of the website commenting policy.
* Just because a student comments on social media does not mean they will comment on the website if the policy is identical.
* It is unclear if the students even use Facebook, since the question included multiple social media networks as possibilities.
* There may be other reasons that the students are not leaving comments on the website, other than believing that the policy is unfair. After all, only 16% said this.

5. Based on this data, how would you proceed to improve your audience engagement?

Possible answers include:

* Survey at least 80 students, but preferably as many students as possible.
* Ask more questions about why the students do not comment on the website.
* Follow up with the students who believe the policy is unfair, if possible.
* Create a focus group for the commenting policy, made up of students with each of these perspectives, to get more specific information.