

Homework 2

Name _____

1. To determine her students' fitness levels, a gym teacher has them run a mile on a track and records their times to the nearest second.

a.) Is this a valid measurement? Explain.

b.) Is this a reliable measurement? Explain.

c.) Which will be greater in this case: the measurement error, or natural variability?

2. Give an example of a measurement that is:

a.) Reliable but biased.

b.) Unbiased but not reliable.

3. The following question contains an intentional bias.

"Do you agree in legalizing marijuana so that the potential health benefits of this drug can fully be explored?"

a.) Which other pitfall is present in the original question?

b.) Rewrite the question so that it is intentionally biased in the other direction (against legalization).

c.) Rewrite the question so that it contains no pitfalls.

4. Go online to a professional polling organization, such as Gallup.com. Write down an example of one of their survey questions.