## AP Stats 2017-18 <br> Name: <br> $\qquad$ <br> Block: <br> HW \#1: Questions on Counting on Dyscalculia <br> By John Allen Paulos, taken from DISCOVER Magazine in March, 199x

Please answer the following questions:

1) What are the three common causes of the problem for misinterpreting statistics that are cited by the author?
2) The author states that we have a preference for remembering statistics that are nice round numbers, typically ones that are multiples of what?
3) What aspect is most critical about a random sample?
4) Are these two phrases the same (meaning are they equally likely): (1) probability that someone is a U.S. citizen given that he or she speaks English, vs (2) probability that someone speaks English given that he or she is a U.S. citizen? Why or why not?
5) Considering that hear that 1 in 8 women will develop breast cancer, should all women be equally fearful of developing the disease within the next few years? Give an example to help explain your answer.
6) On a scale of 1 to 5 ( $1=$ easy and $5=$ extremely difficult), rate how challenging it was to understand the ideas presented in this article. This scaled rating is known as a
$\qquad$ .
7) Based on the author's figure of " $452,888,988,750$ cases of dyscalculia recorded in this country annually", what was the population of the U.S. at the time this article was written?
8) What year was this article published?

NOTE: You should have hand written responses to these questions, preferably on a separate sheet of paper, by FRIDAY, August $\mathbf{1 8}^{\mathbf{t h}}$.

