



Equitable Equations: *Population, sample, parameter, statistic*

Problem 1

In each of the following parts, identify the sample and sample size. What is the population of interest?

- (a) In a survey of 200 iPhone users in the United States, 4% say that their screen has one or more cracks in it.
- (b) A large electronics retailer sends satisfaction surveys to everyone that purchases one of their flat-screen TVs. Last year, 1523 of their 21,044 customers responded.
- (c) Scientists studying the effects of a new antidepressant conduct a trial with 87 adolescents between the ages of 11 and 15. Of these, 43% report a reduction in symptoms.

Problem 2

Determine whether the numerical value given is a parameter or statistic. Explain your answer in just a sentence or two.

- (a) In a recent year, the average salary of a company's 12 vice-presidents was \$475,775.
- (b) In a survey of 1222 Illinois residents, 82% reported dissatisfaction with their state government.
- (c) Official records show that 61% of all voters in a certain township voted in the last election.