

ANSWERS (Form A)

- (1) For these data the Empirical Rule ___ apply. **(B)**
- (2) The median of these data is ___ 1.5. **(A)**
- (3) Regarding the smallest values in these data we can say that ____. **(C)**
- (4) The 90th percentile of these data is ___ 10. **(A)**
- (5) Standardizing Y would create a new variable where the majority of observations are ____. **(B)**
- (6) Standardizing Y would create a new variable that has a ___ distribution. **(A)**
- (7) Consider this excerpt from a 2011 academic research paper in economics “The Price Effects of a Larger Me...reported ratio of 2.8 in the last sentence measures ____. **(A)**
- (8) A November 6th, 2011 *New York Times* article (“Merger of Memphis and County School Districts Revives Race and Class Challenges”) ... This is an unethical use of statistics because ____. **(B)**
- (9) What is the median of X? **(A)**
- (10) What is the mean of Y? **(B)**
- (11) When Y equals 1 how often is X equal to 1? **(B)**
- (12) There is a ___ correlation between X and Y. **(B)**
- (13) The heights of the bars relate to which kind of probability? **(C)**
- (14) In the 1971 article “Belief in the Law of Small Numbers” Tversky and Kahneman mention a researcher who tests two toys – Toy 1 and Toy 2... This is an example of ____. **(C)**
- (15) This graphic shows what is best described as ____. **(A)**
- (16) This graphic illustrates ____. **(A)**
- (17) For Hungary ___ is close to zero. **(A)**
- (18) By increasing the sample size for a linear regression you should expect which of the following? **(E)**
- (19) Which best states the primary research question? **(B)**
- (20) The passage describes observational data. Which would be necessary conditions if we imagine experimental data that could be used to measure the causal effect? **(C)**
- (21) Which is NOT an unobserved (aka lurking or confounding) variable? **(D)**
- (22) Consider a statistical analysis of the linear relationship between the weight of laptops in kilograms (kg) and their retail price in hundreds ... that is \$67 lower” means that ____. **(E)**

- (23) What percent of these data are more than two standard deviations below the mean? **(A)**
- (24) Which of the graphs to the right corresponds to the same data as the STATA summary above? **(C)**
- (25) The original data Kahneman received in a spreadsheet are ___ data. **(C)**
- (26) If skill played an even smaller role we would expect the correlation to ____. **(C)**
- (27) What is the standard deviation of the total enrolment for both campuses combined? **(C)**
- (28) If instead of negatively correlated the enrolments were positively across campuses then the mean total enrolment for both campuses combined would ____. **(C)**
- (29) A politician is believed to have a 55 percent approval rating. What is the chance that a pollster randomly samples 500 people and finds that fewer than 250 approve of the politician? **(A)**
- (30) What percent of retail outlets offer the LaraBar at \$1.99 or less? **(D)**
- (31) How much does the LaraBar cost at the most expensive retail outlets: the top 3 percent? **(E)**
- (32) What is the chance an employee working eight consecutive days is screened more than once? **(B)**
- (33) Suppose ten members of the same extended family all work at the TTC. What is the chance that on a day when they are all working none of them is screened? **(D)**
- (34) The original data containing the price changes, which ultimately led to the production of the above chart, are ___ data. **(C)**
- (35) For it to be a valid summary, which are an underlying assumption behind this chart? **(D)**