

- (1) [1pt] Bubble your FORM CODE **(A)**. (To earn the point, mark it for both Q1 and on the front of your bubble form.)
- (2) [2pts] It could also report the mean ranking of each priority. What is the mean for “Socioeconomic diversity”? **(B)**
- (3) [2pts] It could also report the median ranking of each priority. Which priorities have a median ranking of 2? **(E)**
- (4) [2pts] It could also report the IQR of rankings of each priority. What is the IQR for “Enrolling students with...”? **(C)**
- (5) [2pts] What is the *median* evaluation of the quality of life for the *first (lowest) decile*? **(D)**
- (6) [2pts] What is the *mean* evaluation of the quality of life for the *fourth (highest) quartile*? **(B)**
- (7) [2pts] Approximately how many observations fall within the tallest bin? **(E)**
- (8) [2pts] Which of these box plots could be of the variable X? **(C)**
- (9) [2pts] Approximately what is the sample s.d. of the percent change in salary? **(B)**
- (10) [2pts] Given the histogram, which of these could be the 95th percentile of the percent change in salary? **(B)**
- (11) [2pts] What kind of data are illustrated in the scatter diagram? **(E)**
- (12) [2pts] In Canada a Big Mac is \$4.54 USD and GDP per capita is \$50,398 USD. According to the OLS line what is the predicted price of a Big Mac in Canada? **(E)**
- (13) [2pts] In Pakistan a Big Mac is \$3.44 USD and GDP per capita is \$1,343 USD. What is the residual for Pakistan? **(A)**
- (14) [1pt] In Japan a Big Mac is \$2.99 USD. What is the *Raw Index* for Japan? **(C)**
- (15) [2pts] In Japan a Big Mac is \$2.99 USD and GDP per capita is \$36,332 USD. Given its GDP per capita, does it seem that the Japanese Yen is undervalued? **(B)**
- (16) [2pts] How should you interpret the R-squared (0.6226) of the OLS regression? **(D)**
- (17) [2pts] How should you interpret the intercept (2.5225) of the OLS regression? **(D)**
- (18) [2pts] How should you interpret the slope (0.0349) of the OLS regression? On average _____. **(E)**
- (19) [2pts] On average countries with GDP per capita (USD) that is 1 s.d. higher have Big Mac prices (USD) that _____. **(E)**
- (20) [3pts] What is the coefficient of correlation between the Raw Index and the Adjusted Index? **(A)**
- (21) [1pt] Which kind of data are these credit card choice data? **(C)**
- (22) [1pt] What is the probability that a participant made an optimal choice? **(A)**
- (23) [2pts] What is the probability that a participant shown the baseline video with no ads made an optimal choice? **(D)**
- (24) [2pts] What is the probability that a participant who made an optimal choice saw misleading ads? **(C)**
- (25) [2pts] Which of these statements are TRUE? **(C)**
- (26) [2pts] If the treatments had *absolutely no influence* on the participants’ choices and 936 chose the suboptimal card and 459 saw the baseline video with misleading ads, then what number should replace 340 in the contingency table? **(A)**
- (27) [2pts] Which of these describe valid concerns about the credit card choice study? **(A)**
- (28) [2pts] A manufacturing process has two independent stages. The first stage has a mean of 4.25 hours and a s.d. of 1.05 hours. The second has a mean of 0.75 hours with a s.d. of 0.45 hours. What is the s.d. of *total* production time? **(A)**

- (29)** [3pts] 8% of accounts have a problem an auditor should report. However, the auditor sometimes makes mistakes: s/he reports a problem when there is no problem 7% of the time; s/he reports there is no problem when there is a problem 6% of the time. If the auditor reports a problem, what is the probability that there really is a problem with the account? **(E)**
- (30)** [2pts] What can we conclude from the cross-tabulation for OECD countries? **(B)**
- (31)** [1pt] For each of these 34 countries we have three variables: math, reading, and science scores in 2012. Which kind of data are these? **(C)**
- (32)** [2pts] How should the number 0.085 be *interpreted*? **(B)**
- (33)** [2pts] What would the authors (Pritchett and Summers) say about the graphs above? **(E)**
- (34)** [2pts] Here is a plot of the residuals versus \hat{y} for regressing Real GDP per capita on year (i.e. fitting an OLS line to the *first* graph above). Which statements about this diagnostic plot are TRUE? **(E)**
- (35)** [2pts] Consider this histogram constructed using the PWT 8.1 data. It graphs the average annual growth rate for each decade for each country. Suppose the *standardized* growth rate in a particular country in a particular decade is -1. What does that mean? That country in that decade had an annual GDP growth rate _____. **(C)**
- (36)** [2pts] How should you interpret 0.38? In these data, firms that have assets that are _____ higher typically have revenues that are _____ higher. **(D)**
- (37)** [2pts] What would happen to 0.38 if the x variable were the natural log of assets measured in *millions* of dollars (and the y variable continued to be the natural log of revenues measured in billions of dollars)? **(A)**