1. Consider the scatterplot shown above. Imagine (or sketch) the best regression line. Eyeball-estimate the regression line slope. ________________________________

2. Consider the scatterplot shown above. Imagine (or sketch) the best regression line. Eyeball-estimate the regression line intercept. _____________________________________

3. Consider the scatterplot shown above. Imagine (or sketch) the best regression line. Write out (by eyeball) the regression line equation. ____________________________________

The remaining cumulative review questions are multiple choice: Do not calculate the answers!!!!

Scenario for 4, 5, 6, and 7. Suppose you are researching self-esteem in delinquent adolescents. You take a group of 10 adolescents from juvenile hall and give them a measure of self-esteem. Then you take a group of 10 adolescents from a local high school who have never been in juvenile hall and give them the same measure. Do delinquent adolescents have lower self-esteem than non-delinquent adolescents?

Self Esteem Score
Juvenile Hall: 62, 60, 68, 62, 58, 70, 61, 52, 59, 56
High School: 54, 62, 51, 52, 70, 61, 59, 48, 67, 59

4. Is this a yes/no question? Enter “yes” or “no”: __________________
5. Which of the following are yes/no questions?
Enter as many letters as apply: ________________
   a. % area under the curve.
b. confidence interval.
c. one-sample \( z \) test.
d. one-sample \( t \) test.
e. two-independent-sample \( t \) test.
f. two-dependent-sample \( t \) test.
g. 3-or-more-independent-sample test (ANOVA).
h. performing a power analysis
i. testing the strength of the relationship
j. testing a hypothesis about the slope of a regression line

6. This problem requires
   a. % area under the curve.
b. confidence interval.
c. one-sample \( z \) test.
d. one-sample \( t \) test.
e. two-independent-sample \( t \) test.
f. two-dependent-sample \( t \) test.
g. 3-or-more-independent-sample test (ANOVA).
h. performing a power analysis
i. testing the strength of the relationship
j. testing a hypothesis about the slope of a regression line

7. How many degrees of freedom are there for this test? Enter the number or “not applicable” (“n/a”):____________

Scenario for 8, 9, and 10. How many participants should you use if you are about to conduct a two-independent-sample \( t \) test in a situation where you expect a small standardized effect size?

8. Is this a yes/no question? Enter “yes” or “no”: ________________

9. This problem requires
   a. % area under the curve.
b. confidence interval.
c. one-sample \( z \) test.
d. one-sample \( t \) test.
e. two-independent-sample \( t \) test.
f. two-dependent-sample \( t \) test.
g. 3-or-more-independent-sample test (ANOVA).
h. performing a power analysis
i. testing the strength of the relationship
j. testing a hypothesis about the slope of a regression line
10. How many degrees of freedom are there for this test? Enter the number or “not applicable” (“n/a”):____________

END OF QUIZ