

**GEOG 400/500 Project 1**

**Name:**

1  A (V→D)  B (D→V) Which makes more sense?

2  A (veloc)  B (disch) Label one as X and the other as Y

3  $\alpha =$   Most common tolerance standard for Type I error risk (false positive)

4  Which trend line option produces the most accurate and æsthetic line?

5  $Y =$    $+$    $X$   $Y = a + bX$  3 decimal places

6  $r =$   3 decimal places of accuracy

7  $r^2 =$   3 decimal places of accuracy

8  $F =$   3 decimal places of accuracy

9  $\text{prob} =$   3 decimal places of accuracy

10  Yes  No at your  $\alpha$ , is this model significant?

11 Intepretation of linear model

12  which histogram is concave?

13  $Y =$    $+$    $\log(X)$   $Y = a + b [\log(X)]$  3 decimal places

14  $r =$   3 decimal places of accuracy

15  $r^2 =$   3 decimal places of accuracy

16  $F =$  \_\_\_\_\_ 3 decimal places of accuracy

17  $\text{prob} =$  \_\_\_\_\_ 3 decimal places of accuracy

18 Interpretation of semi-log model

19  $Y =$  \_\_\_\_\_  $X$  \_\_\_\_\_  $Y = aX^b$  3 decimal places

20  $r =$  \_\_\_\_\_ 3 decimal places of accuracy

21  $r^2 =$  \_\_\_\_\_ 3 decimal places of accuracy

22  $F =$  \_\_\_\_\_ 3 decimal places of accuracy

23  $\text{prob} =$  \_\_\_\_\_ 3 decimal places of accuracy

24 Interpretation of log-log model

25 Grand overall analysis

If you need more space for questions 11, 18, 24, or 25, continue down below (and include #). Be sure to cover direction of association (direct or inverse),  $r^2$  (proportion explained), whether it's significant ( $p < \alpha$ ?), and, where appropriate, how æsthetic the trend line is and whether a given mathematical transform is worth the bother in terms of improvements in significance and æsthetics.

