

Lab 1

Name: _____

Due 2/4/2021

Math 1150: Winter 2021

Instructor: Andrade

Introduction:

During class we discussed the impact that assumptions can have on a mathematical model. Choosing reasonable assumptions relies on sound logical deductions. The objective of this lab is to test your powers of deduction. Much like the activity we did in class, in this assignment you are given a set of facts and asked to draw a conclusion. Your complete solution to this question should be submitted in the form of a lab report following the instructions posted on Canvas.

No Cause for Celebration

The Smiths, the Joneses, and the Browns have the habit of referring to their children by number, according to the order in which their children were born. The following statements refer to their children in this manner:

1. The second child to each family has 3 brothers.
2. The third child born to each family has 2 sisters.
3. The fourth child born to the Joneses and the fourth child born to the Smiths have the same number of brothers.
4. The fifth child born to the Smiths and the fifth child born to the Browns have the same number of sisters.
5. The sixth child born to the Browns has the same number of brothers as the sixth child born to the Joneses has sisters.
6. Each family has a different number of children.
7. In only one family is the first born a boy.
8. In only one family is the last born a girl.
9. On the day that a first-born boy married a last-born girl, only two families has cause for celebration-the bride's and the groom's.

Which one of the three families had no cause for celebration on that day?