Pract Quiz – Probability Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Geom Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In a bag of marbles, there are 4 red, 5 blue, and 6 green. Find the following:

1. Drawing one marble, P(Red or Green)

Are these mutually exclusive, or overlapping?

2. Drawing 2 marbles with replacement, P(Blue and Green)

3. Drawing 2 marbles without replacement, P(Red and Red)

The following diagram represents kids who own bikes and/or skateboards in a certain neighborhood. Use it to calculate the following.

B S *n* = ?

7 4 5

6

4. P(B and S) = 5. P(B or S) =

6. P(S) 7. P(Not B)

8. P(S given B)

In a Coordinate Algebra class, 18 students were male and 13 students were female. Out of those students, 14 of the guys and 9 of the girls passed the EOC. Construct a contingency table with this information:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Males | Females |  |
| Passed |  |  |  |
| Did not Pass |  |  |  |
|  |  |  |  |

Use the table to find the following probabilities:

9. P(Boy who passed the EOC)

10. P(Girl or someone who didn’t pass)

11. P(Passing grade given that you know it’s a boy)

Not from the Chart:

13. Given the following data, show that events M and N are independent or not independent.

P(M) = .279 P(N) = .562 P(M∩N) = .821