Name:

Elementary Statistics **HW 5.2 - Part 1**

The table below lists probabilities for the corresponding numbers of girls in 3 births. Use this table to answer questions 1-5:

Number of Girls in Three Births	
Number of Girls, x	**P(x)**
0	0.125
1	0.375
2	0.375
3	0.125

1. What is the random variable?

2. What are the possible values of the random variable?

3. Are these values numerical?

4. Are these values discrete or continuous? Explain.

5. Does this table show a probability distribution? Show how the requirements are satisfied or not satisfied.

For questions 6-11, identify the given values as a discrete random variable, continuous random variable, or not a random variable:

6. Eye colors of humans on commercial aircraft flights

7. Numbers of passengers on commercial aircraft flights

8. Weights of humans on commercial aircraft flights

9. Numbers of randomly generated digits before getting the digit 3

10. Political party affiliations of adults in the United States

11. Exact costs of presidential campaigns

12. Four males with an X-linked genetic disorder have one child each. The random variable x is the number of children among the four who inherit the X-linked genetic disorder. Use the following data to construct a probability histogram.

Number of children with Inherited genetic disorder x	P(x)
0	0.0625
1	0.2500
2	0.3750
3	0.2500
4	0.0625

13. When conducting research on color blindness in males, a researcher forms random groups with five males in each group. The random variable x is the number of males in the group who have a form of color blindness (based on data from the National Institutes of Health). Use this data to construct a probability histogram.

Number of males in group that have color blindness x	P(x)
0	0.659
1	0.287
2	0.050
3	0.004
4	0.001
5	0+