Table Number:\_\_\_\_\_\_\_\_\_\_ Group Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group Members:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Binomial Probability Distribution - Practice with Vocabulary

1. According to the Beacon Journal, 40% of bicycles stolen in Akron are recovered. You have a random sample of 6 bicycles. Complete the table for  *n* (sample size), *p* (the unchanging probability of success), and *x* (the number of successes). From this information, write how you would enter it into your calculator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Vocabulary** | **n**  **(sample size)** | **P (probability of success)** | **What values are implied in each of these phrases?** | **Write the TI\*84 calculator command** |
| “exactly 4” |  |  |  |  |
| “less than 4” |  |  |  |  |
| “at least 4” |  |  |  |  |
| “more than 4” |  |  |  |  |
| “at most 4” |  |  |  |  |

1. Suppose that for a given dog breed, the probability of giving birth to a male puppy is 48%. Suppose also that one particular female dog had a litter of 5 puppies. Complete the table for  *n* (sample size), *p* (the unchanging probability of success), and *x* (the number of successes). From this information, write how you would enter it into your calculator.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Vocabulary** | **n**  **(sample size)** | **P (probability of success)** | **What values are implied in each of these phrases?** | **Write the TI\*84 calculator command** |
| “exactly 3” |  |  |  |  |
| “less than 3” |  |  |  |  |
| “at least 3” |  |  |  |  |
| “more than 3” |  |  |  |  |
| “at most 3” |  |  |  |  |