

15. Graphing a Binomial Probability Distribution

To graph a binomial distribution for $n = 5$ and $p = 0.25$, we need to enter the values of the random variable in one list and the associated probabilities in a second list.

1. Insert a *Lists & Spreadsheet* page. Press **(ctrl) [I]**, arrow to *Add Lists & Spreadsheet* and press **(enter)**.
 - Name column A **success** and type the following values: 0, 1, 2, 3, 4, 5.
 - Name column B **psuccess**.
 - Arrow down to the formula cell of column B and press **(enter)**. **psuccess:=** should appear.
 - Type **binompdf(5, 0.25, success)** and press **(enter)**. The probabilities of 0, 1, 2, 3, 4, and 5 successes should appear in column B.

	A success	B psucc...	C	D
=		=binompdf		
1	0	0.237305		
2	1	0.395508		
3	2	0.263672		
4	3	0.087891		
5	4	0.014648		
B1	=0.2373046875			

2. Make a histogram of the probability distribution using the method shown in Section 6.1 Tech Corner (page 370).

