Algebra 2

8-07 Binomial Distributions

that gives the probability of of the possible outcomes in a probability experiment The sum of the probabilities = Construct a Probability Distribution			
		1. Make a table of	
		2. Make a	
The spinner is divided into three equal parts. Let <i>x</i> be a random variable that rep	presents the sum when the spinner is spun		
twice. Make a table and draw a histogram showing the probability distribution fo	or <i>x</i> .		
What is the most likely sum when spinning the three-section spinner twice?			
What is the probability that the sum of the two spins is odd?			
Binomial Distributions			
• Two outcomes: or			
• Independent (<i>n</i>)			
 Probability for success is the for each trial (p) 			
$P(k \text{ successes}) = {}_{n}C_{k}p^{k}(1-p)^{n-1}$	-k		
Calculate the probability of flipping a coin 20 times and getting 3 heads.			
only 1 head			
sing a nord			

At college, 53% of students receive financial aid. In a random group of 9 students, what is the probability that exactly 5 of them receive financial aid?

Draw a histogram of binomial distribution of students and find the probability of fewer than 3 students receiving financial aid.



In your school, 30% of students plan to attend a movie night. You ask 5 randomly chosen students from your school whether they plan to attend the movie night.

a. Draw a histogram

b. Most likely

c. Probability at most 2 attend