7 Binomial Distribution

Objectives:

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| Understand the conditions necessary for a random variable to have a binomial distribution |
| Calculate probabilities for a binomial distribution |
| Learn the parameters of a binomial distribution |
| Understand how to approximate a real-world scenario as a binomial distribution |

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| Content | Teacher's Activity  | Student's Activity | Assignments |
| 7.1 Binomial Distribution | * + Through an example, introduce the terms related to a binomial distribution: number of trials (*n*), success/failure at each trial, probability of success (*p*)/ failure (*f*) at each trial
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 | * + Understand the terms related to a binomial distribution
	+ C:\EB7C60E5\6563E91F-D90E-4BDE-BA4F-BF5863B4676F_files\image003.png
	+ C:\EB7C60E5\6563E91F-D90E-4BDE-BA4F-BF5863B4676F_files\image004.png

C:\EB7C60E5\6563E91F-D90E-4BDE-BA4F-BF5863B4676F_files\image005.png | Ex 7A |
| 7.2 Using the binomial distribution as a model  | * + Explain the four properties that help identify a probability distribution as a binomial distribution [X ~ B(*n*, *p*) ]
	+ Through examples, determine if a given distribution is a binomial distribution
	+ Through examples, explain what assumptions need to be made in order for a given distribution to satisfy the conditions of a binomial distribution
 | * + Given a distribution, verify if it satisfies the four conditions of a binomial distribution
	+ Given a situation, state the assumptions that need to be made in order to use the binomial distribution to model it
 | * + Textbook Examples
	+ Ex 7B

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| Additional Practice  | * + Help students as required to solve the textbook problems
 | * + Work out additional problems in the Misc Ex
 | * + Misc Ex 7
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| Test |   |   |  Clubbed with Probability Distribution |