

Third Quarter Learning Targets

	Learning Targets	Review Problems	1 st	2 nd	3 rd	Notes
6C	<p>Binomial And Geometric Probability</p> <p>⇒ Determine whether a probability situation is binomial (BINS, including the 10% Condition) or geometric (first success)</p> <p>⇒ Calculate binomial and geometric probabilities</p> <p>⇒ Calculate the mean of a geometric random variable; describe the shape of a geometric probability distribution</p>	R6.5a, R6.6, R6.7, T6.7, T6.8, T6.9, T6.10, T6.12				
6D	<p>Using the Normal Model to Approximate Binomial Probabilities</p> <p>⇒ Calculate the mean and standard deviation of a binomial distribution</p> <p>⇒ Use the Large Counts Condition to determine whether the Normal model can be used to approximate a binomial distribution</p> <p>⇒ Calculate binomial probabilities using the Normal model</p>	R6.5b,c, R6.8, T6.14				
7A	<p>Sampling Distributions</p> <p>⇒ Distinguish between a statistic and a parameter</p> <p>⇒ Distinguish between the sample, the population, and the sampling distribution</p> <p>⇒ Use the sampling distribution of a statistic to evaluate a claim about a parameter</p> <p>⇒ Understand the concepts of bias and variability as they apply to sample statistics</p>	R7.1, R7.2, R7.3, T7.1, T7.2, T7.5, T7.11				
7B	<p>Sampling Distribution of the Sample Proportion \hat{p}</p> <p>⇒ Find the mean (check for randomness)</p> <p>⇒ Find the standard deviation (check 10% Condition)</p> <p>⇒ Determine if the sampling distribution is nearly normal (check np and $n(1 - p)$)</p> <p>⇒ Calculate probabilities involving \hat{p}</p>	R7.4, R7.5, T7.3, T7.7, T7.13				

7C	<p>Sampling Distribution of the Sample Mean \bar{x}</p> <p>⇒ Find the mean (check for randomness)</p> <p>⇒ Find the standard deviation (check 10% Condition)</p> <p>⇒ Determine if the sampling distribution is nearly normal (check shape of population and sample size)</p> <p>⇒ Calculate probabilities involving \bar{x}</p>	R7.6, R7.7, T7.4, T7.6, T7.8, T7.9, T7.10, T7.12				
8A	<p>Confidence Intervals – General Information</p> <p>⇒ Understand and find a point estimate, margin of error and critical value</p> <p>⇒ Understand the interplay between sample size, confidence level and length of confidence interval</p>	R8.2a, R8.3a, R8.6b, R8.9, T8.1, T8.7, T8.9, T8.10				
8B	<p>Confidence Intervals - Proportions</p> <p>⇒ Construct a confidence interval for a proportion using the four step process (including checking conditions and determining the critical value)</p> <p>⇒ Interpret a confidence interval and confidence level in context</p>	R8.1a, R8.3, R8.6a, T8.6, T8.11				
8C	<p>Confidence Intervals - Means</p> <p>⇒ Understand the need for the t-distributions and the characteristics of the t-distributions</p> <p>⇒ Construct a confidence interval for a mean using the four step process (including checking conditions and determining the critical value)</p> <p>⇒ Interpret a confidence interval and confidence level in context</p>	R8.1b, R8.2, R8.4, R8.7, R8.10, T8.2, T8.3, T8.5, T8.12, T8.13				
8D	<p>Confidence Intervals – Determining Sample Size</p> <p>⇒ Determine the sample size needed for a given confidence level and margin of error for both means and proportions</p>	R8.5, R8.8, T8.4, T8.8				

9A	Significance Tests – General Information Part One ⇒ State the null and alternative hypotheses ⇒ Understand the logic of a significance test including p-value and alpha level ⇒ Identify Type I and Type II Errors with their consequences in context	R9.1, R9.3a,b, R9.4b,c, T9.1, T9.3, T9.4, T9.11b				
9B	Significance Tests - Proportions ⇒ Perform a significance test for a proportion using the four step process (including checking conditions) ⇒ Interpret the p-value in the context of the problem	R9.4a, R9.5a,b, T9.5, T9.8, T9.11a				

- Each learning target will be assessed the week it is taught. It will be assessed again at least one more time a week or two later.
 - If the last grade for a learning target is the highest grade for that learning target, then that will be the grade for the learning target (replacing any lower grades in the grade book).
 - If the last grade is not the highest grade for that learning target, then the most recent grade will be averaged with the existing grade.
 - Parents may be notified when a score of 0 or 1 is earned on any learning target.

Score Conversions:

Target Score	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Percent	40	45	50	55	60	65	70	75	80	85	90	95	100