Unit 7: Probability Distributions for Continuous Variables				
7.00	**Prerequisite Skills**			
Learning Goals	I know how to calculate the area of a rectangle and trapezoid.	1	2	3
	I can organize data using histograms, means, standard deviation, and z-scores.	1	2	3
	I can use permutations and combinations to count.	1	2	3
	I can calculate probabilities of events.	1	2	3
	I can calculate discrete probability distributions.	1	2	3
7.10	**Continuous Random Variables**			
Learning Goals	I can distinguish between discrete variables and continuous variables.	1	2	3
	I can work with sample values for situations that can take on continuous values.	1	2	3
	I can represent a probability distribution using a mathematical model.	1	2	3
	I can represent a sample of values of a continuous random variable using a frequency table, a frequency histogram, and a frequency polygon.	1	2	3
7.20	**The Normal Distribution and z-Scores**			
Learning Goals	I can determine the theoretical probability for a continuous random variable over a range of values.	1	2	3
	I can determine the mean and standard deviation of a sample of values.	1	2	3
	I can calculate and explain the meaning of a z-score.	1	2	3
	I can solve real-world probability problems involving normal distributions.	1	2	3
7.30	**Applications of the Normal Distribution**			
Learning Goals	I can recognize the general characteristics of a normal distribution.	1	2	3
	I can use technology to simulate a normal distribution in order to investigate its properties.	1	2	3
	I can determine probabilities for a normal distribution.	1	2	3
7.40	**Confidence Intervals**			
Learning Goals	I can distinguish among the meanings of common confidence levels such as 90%, 95%, and 99%.	1	2	3
	I can determine the margin of error for a population mean estimated using a sample.	1	2	3
	I can determine the upper and lower limits of the confidence interval.	1	2	3
7.50	**Connections to Discrete Random Variables**			
Learning Goals	I can make connections between a normal distribution and a binomial distribution.	1	2	3
	I can make connections between a normal distribution and a hypergeometric distribution.	1	2	3
	I can recognize the role of the number of trials in these connections.	1	2	3
7.60	**Review**			
7.65	**Extra Review (if necessary)**			
7.70	**Test**			

After each lesson grade yourself from one to three on each learning goal based on the criteria below. This will help you to build a review plan for the end of unit assessment.

1. I need extra help with this concept
2. I need more practice with this concept
3. I can teach this concept to someone else

Unit 7 – Probability Distributions for Continuous Variables

7.00 – MHR Page 318 #s 1 – 15

7.10 – MHR Page 327 #s 1 – 5 & 7

7.20 – MHR Page 341 #s 1 – 5, 9, 10 & 13

7.30 – MHR Page 349 #s 1 – 4 & 6 – 8

7.40 – MHR Page 359 #s 1 – 5, 7 & 9

7.50 – MHR Page 370 #s 1 – 6 & 8 – 11

7.60 – MHR Page 372 #s 1 – 7 & 9 – 12 [12(e) should be comparing to (d), not (c)]

7.65 – MHR Page 375 #s 1 – 15

7.70 – **TEST – Probability Distributions for Continuous Variables**