**CHAPTER 6 – Random Variables**

**Homework**

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| 27 (JAN.) Monday  *6.1b / 6.2a*  # 19, 23, 25, 29, 37, 41  **POW #8 assigned** | 28 Tuesday  *6.2b*  # 47, 49, 51, 59, 63  (worksheet)  **Test 5 Corrections Due** | 29 Wednesday  *6.3a*  # 61, 65, 66, 69, 71, 73, 75, 77 | 30 Thursday  *6.3b*  # 79-89 odd | 31 Friday  *6.3c*  # 95, 97, 99, 101-103  **POW #8 DUE** |
| 3 (FEB.)  *Review Ch. 6*  **POW #9 assigned** | 4  **CH. 6 TEST** | 5  *7.1a* | 6  *7.1b*  **POW #9 DUE** | 7  **No School** |

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**Chapter Objectives**

* Construct a **probability distribution** table and histogram
* Answer probability questions about values of a **discrete random variable**
* Calculate the mean (**expected value**) and standard deviation of a discrete

random variable

* Understand **continuous random variables** and determine probabilities

of events as areas under density curves.

* Describe the effects of transforming a random variable by +, −, ×, ÷ by a constant
* Use the rules for means and variances to solve problems involving sums, differences, and linear combinations of random variables
* Given a Normal random variable, find probabilities of events as areas under the standard normal curve
* Determine whether a random variable is binomial or geometric using the 4 conditions for each
* Calculate **binomial probabilities**
* Calculate the mean and standard deviation of a binomial random variable
* Calculate **geometric probabilities**