**ARC Week at Glance**

**Subject: Math Course: A.P. Statistics Grade: 11th – 12th Dates: 1/6 – 1/10**

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| AP Standard IIIA: Students will explore discrete random variables and determine their probability distributions, expected value(s), and standard deviation.  AP Standard IIIB: Students will be able to combine independent random variables and determine the mean and standard deviation for sums and differences.  **Assessment(s):  Quiz  Unit Test  MyMathLab/MathXL  Lab  FRQ’s** | | | | | | |
|  | **Learning Target**  **(I am learning about…)** | **Criteria for Success**  **(I can…)** | **Opening**  *(10 - 15 Mins)* | **Work-Session**  *(20 - 25 mins)* | **Closing**  *(5 - 10 mins)* | **Literacy Tasks/Focus** |
| *(Include at least one/two formatives\*in any part of the lesson as needed)* | | |
| **Monday** | I am learning about discrete random variables. | I can determine expected value and standard deviation for discrete random variables. | Opener Part I on Chapter 15: Random Variables pages 389 – 395 | Notes and Modeling on Parts II and III Chapter 15: Random Variables pages 389 – 395 | Part IV on Chapter 15: Random Variables pages 389 – 395 | Opener T&T:  Is the company likely to make a profit with their plan? Why or why not? |
| **Tuesday** | I am learning about operations with discrete random variables. | I can determine mean and standard deviation for sums and differences. | Check and Discuss  Part IV on Chapter 15: Random Variables pages 389 – 395 | Notes and Modeling on Chapter 15: Random Variables pages 395 – 398 | Part IV on Chapter 15: Random Variables pages 395 – 398 | Are the answers to Parts IV-E and IV-F on the closing equal? Why or Why not? |
| **Wednesday** | I am learning about transformations with discrete random variables. | I can determine expected value and standard deviation with real-world applications. | “Just Checking” with Chapter 15: Random Variables pages 403 – 404 | Notes and Modeling on Part II Chapter 15: Random Variables pages 403 – 404 | Read “Rules Recap”  \*MML Chapter 15 due Thursday! | Explain what expected value MEANS in the context of our problems. |
| **Thursday** | I am learning about transformations with discrete random variables. | I can determine expected value and standard deviation with real-world applications. | Read “Rules Recap” then T&T with partner to check understanding. | Practice Exercises #’s 44, 46, 48, and 52 in small groups | Check #’s 44, 46, 48, and 52 and discuss do’s and do nots  \*MML Chapter 15 due Tuesday! | See Opening |
| **Friday** | I am learning about transformations with discrete random variables. | I can determine expected value and standard deviation with real-world applications. | Return FRQ’s-  #5 from 1999 and  # 2 from 2003 then  view exemplars and AP Grading Rubrics | FRQ #3 from 2008  with guidance | FRQ #2 from 2012  with peer | Connect expected value with mean if a discrete random variable distribution, with meaning/context. |

**\*** Exit Ticket/Final Stretch Check  Electronic Tools  Dry Erase Boards – quick checks  Turn & Talk Discussion (verbal responses)  Teacher Observation – document Clipboard

Quick Write/Draw  Annotation  Extended Writing  Socratic Seminar  Jigsaw  Thinking Maps  Worked Examples  Other : \_\_\_\_\_\_\_\_\_\_\_