**Unit 7**

[Unit 7 item options](https://cobbk12.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_782590_1&course_id=_17444_1#contextMenu)[Hide Details](https://cobbk12.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_782590_1&course_id=_17444_1)

**Unit 7 - Sampling Distributions**

[**Ch 07 Reading Guide \_1\_.docx**](https://cobbk12.blackboard.com/bbcswebdav/pid-1327267-dt-content-rid-7226244_2/xid-7226244_2)**[Click for more options](https://cobbk12.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_782590_1&course_id=_17444_1#contextMenu)**

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| --- | --- | --- | --- |
| Date | Topic | Keeper Notes/ reading assignment | Written Assignment class |
| Wed  3/4 | **7.1 What is a Sampling Distribution?**  Video  WB 129-130 | [Keeper 7.1  What is a Sampling Distribution?](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.1.ppt)  Pages 413-428 Do Guided reading | page 428   #1,3,5,7,9,11,17-29all |
|  |  |  |  |
| Thurs  3/5 | **7.2 Sample Proportions**  **Act. Cents and the Central Limit Theorem**  WB 132-133 | Quiz 7.1  [Keeper 7.2  Sample Proportions](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.2.ppt)  [p](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch1_intro.ppt)ages 432-448  Do Guided reading | page 439  29,33,35,37,41,49,51,53,55 |
|  |  |  |  |
| Friday  3/6 | WB 135-136  **7.3 Sample Means**  **Act. How Many Tanks** | Quiz 7.2  [Keeper 7.3  Sample Means](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.3.ppt)  pages 440-453  Do Guided reading | page 453  57,59,61,63,65-68 all |
| Monday  3/9 | **7.3 Sample Means**  **Act. How Many Tanks**  WB 142 | [Keeper 7.3  Sample Means](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.3.ppt)  pages 440-453  Do Guided reading | page 453  57,59,61,63,65-68 all |
| Tuesday  3/10 | Review  WB 139-140 | Quiz 7.3  [Chapter 7 - Sampling Distributions Quick Notes](https://cobbk12.blackboard.com/bbcswebdav/pid-1327267-dt-content-rid-5609130_2/xid-5609130_2) [Click for more options](https://cobbk12.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_782590_1&course_id=_17444_1#contextMenu)    Chapter Summary page 457 Finish guided reading | page 458 R7.1-R7.7  FRQ |
| Wed  3/11 | TEST 7 |  |  |
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|  |  |  |  |

**STANDARDS**

**Anticipating patterns: Exploring random phenomena using probabilities and simulations**

A.  Sampling Distributions

1. Sampling distribution of a sample proportion
2. Sampling distribution of a sample mean
3. Central Limit Theorem
4. Sampling distribution of a difference between two independent sample proportions
5. Sampling distribution of a difference between two independent sample means
6. Simulation of sampling distributions
7. t-distributions
8. Chi-square distributions

**IMPORTANT DATES**

3/17- Quiz 7.1-7.2

3/22  AP Statistics Practice Test 7

**QUICK NOTES**

[Chapter 7 - Sampling Distributions Quick Notes](https://cobbk12.blackboard.com/bbcswebdav/pid-1327267-dt-content-rid-5609130_2/xid-5609130_2) [Click for more options](https://cobbk12.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_782590_1&course_id=_17444_1#contextMenu)

**LESSONS**

**7.1 What is a Sampling Distribution?**

* Distinguish between a parameter and a statistic.
* Understand the definition of a sampling distribution.
* Distinguish between population distribution, sampling distribution, and the distribution of sample data.
* Determine whether a statistic is an unbiased estimator of a population parameter.
* Understand the relationship between sample size and the variability of an estimator.

[Keeper 7.1  What is a Sampling Distribution?](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.1.ppt)

HW:  1, 3, 5, 7, 9, 11, 13, 17-20

**7.2 Sample Proportions**

* Find the mean and standard deviation of the sampling distribution of a sample proportion for an SRS of size ***n*** from a population having proportion ***p***of successes.
* Check whether the 10% and Normal conditions are met in a given setting.
* Use Normal approximation to calculate probabilities involving.
* Use the sampling distribution ofto evaluate a claim about a population proportion.

[Keeper 7.2  Sample Proportions](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.2.ppt)

HW:  21-24, 27, 29, 33, 35, 37, 41

**7.3 Sample Means**

* Find the mean and standard deviation of the sampling distribution of a sample mean from an SRS of size ***n***.
* Calculate probabilities involving a sample mean  when the population distribution is Normal.
* Explain how the shape of the sampling distribution of  is related to the shape of the population distribution.
* Use the central limit theorem to help find probabilities involving a sample mean .

[Keeper 7.3  Sample Means](http://www.hopkins.k12.ky.us/webpages/vbrowning/files/tps4e_ch7_7.3.ppt)

HW:  43-46, 49, 51, 53, 55, 57, 59, 61, 63, 65-68