

Sequences, Series & Probability

| Dates | Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------|-----------------------------|--|-------------|---|--------------------------|
| 4/30-5/3 | 9.1 Sequences and Series | 9.2 Arithmetic Sequences and Series | | 9.3 Geometric Sequences and Series | 9.1 – 9.3 Review |
| 5/6 -5/10 | Quiz 9.1 – 9.3 | 9.5 Binomial Theorem | | 9.6 Counting Principles (Permutations and Combinations) | 9.7 Probability |
| 5/13-5/17 | Review Ch. 9 | Ch 9 TEST | | Exam Review | Exam Review |
| 5/20-5/24 | Exam Review | Exam Review | Exam Review | Finals Period 1, 3, 5 | Finals Period 2, 4, 6 |
| 5/27-5/31 | No School | Graduation | | | |

<http://www.larsonprecalculus.com/pcwl3e/>

Learning Targets/HW

9.1 Sequences and Series

- Use sequence notation to write the terms of a sequence
- Use a recursive rule to find terms of a sequence
- Use factorial notation
- Use sigma notation to represent a sequence
- Find the sum of a series
- Use sequence and series notation to model and solve real-world problems
- 9.1 HW: p.613, #9, 11, 15, 19, 23, 25, 27, 31, 37, 39, 45, 49-55 (odd), 59-71 (odd), 79, 83, 85, 89-97 (odd)

9.2 Arithmetic Sequences and Partial Sums

- Recognize, write, and find the n th term of an arithmetic sequence
- Find the n th partial sum of an arithmetic series
- Use arithmetic sequences to model and solve real-life problems
- 9.2 HW: p.622, #5, 9, 11, 15, 19, 23, 25, 29, 31, 37-45 (odd), 49-59 (odd), 63, 65, 67, 71, 73, 77, 79, 83

9.3 Geometric Sequences and Series

- Recognize, write, and find the n th term of a geometric sequence
- Find the sum of a finite geometric sequence
- Find the sum of an infinite geometric sequence
- Use geometric sequences to model and solve real-life problems
- 9.3 HW: p.631, #7-43 (eoo), 45-51 (odd), 57, 63, 67, 69, 71, 75, 77, 79, 85, 93

Review 9.1 - 9.3

HW: Practice worksheet 9.1 – 9.3

9.5 The Binomial Theorem

- *Use the binomial theorem to calculate binomial coefficients*
- *Use Pascal's Triangle to expand binomials*
- *Use the binomial theorem to expand binomials*
- *Use the binomial theorem to calculate binomial coefficients*
- 9.5 HW: p. 649, #5-18, 23, 27, 31, 41-45, 47, 49, 51, 55, 57, 59, 61, 73, 75, 85-88

9.6 Counting Principles

- *Solve simple counting problems*
- *Use the Fundamental Counting Principle to solve counting problems*
- *Use permutations to solve counting problems*
- *Use combinations to solve counting problems*
- 9.6 HW: p.659, #7-33 (odd), 41-51 (odd), 59, 61, 67

9.7 Probability

- *Find the probability of events*
- *Find the probability of mutually exclusive events*
- *Find the probability of independent events*
- *Find the probability of the complement of an event*
- 9.7 HW: p.670, #1-8, 9-29 (odd), 31, 33, 37-57 (odd), 61

Chapter 9 Review - to be announced