

JANUARY 2023

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|--|---------|---------------|----------|--|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | About Time 25 | 26 | Composite Triple + 27 Function Sums | 28 |
| 29 | Family of Parabolas 30 + Minimizing a Sum of Squares Quiz: Syllabus | 31 | | | | |

FEBRUARY 2023

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|---|---------|--|----------|---|----------|
| | | | Elusive Unknowns 1 | 2 | Square Derivative 3 + Optimization of Area of a Triangle <i>Quiz: Wallis's Arithmetica Infinitorum</i> | 4 |
| 5 | Frank N. Stein 6 <i>Quiz: Newton's Golden Years</i> | 7 | Optimization of 8 Area by Parabolas | 9 | Optimization of the 10 Area of a Parallelogram <i>Quiz: the Early Work of Leibniz</i> | 11 |
| 12 | Defining a Function 13 by Its Properties, Pts. I, II, and III <i>Quiz: the Early Work of Leibniz</i> | 14 | Challenging 15 Integrals <i>Write-Up 1 Check</i> | 16 | Gabriel's Horn 17 <i>Quiz: Newton's Fluxional Calculus</i> | 18 |
| 19 | Some Series Sums 20 + Sum Sleuthing <i>Quiz: Marie Agnesi and Emilie du Châtelet</i> | 21 | <i>Presentations</i> 22 | 23 | Some Fraction 24 Sums <i>Quiz: MacLaurin's Treatise on Fluxions</i> | 25 |
| 26 | Odd Sum 27 <i>Quiz: Euler's Life and Contributions</i> | 28 | | | | |

MARCH 2023

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|---|------------------------|---|------------------------|--|----------|
| | | | Collapsing Product 1 | 2 | Long Product 3 Quiz: D'Alembert and Cauchy on Limits | 4 |
| 5 | Cubic Product 6 Quiz: Sonya Kovalevsky | 7 | Composite Chaos 8 | 9 | Convergence to Zero 10 Quiz: Mathematical Induction | 11 |
| 12 | <i>Spring Break</i> 13 | <i>Spring Break</i> 14 | <i>Spring Break</i> 15 | <i>Spring Break</i> 16 | <i>Spring Break</i> 17 | 18 |
| 19 | Recursive Sequence 20 Quiz: Francesco Maurolico's Use of Induction | 21 | Loop Sum 22 Write-Up 1 Due Write-Up 2 Check | 23 | Comparing Arithmetic Sequences 24 Quiz: Fermat's <i>Arithmetica</i> | 25 |
| 26 | Spiral Out 27 Quiz: the Famous Last Theorem of Fermat | 28 | Presentations 29 | 30 | Diamonds 31 Quiz: Euler's Life and Contributions | 1 |

APRIL 2023

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|--|---------|---|----------|---|----------|
| 2 | Tilted Tiles 3 <i>Quiz: Gauss's Disquisitiones Arithmeticae</i> | 4 | Counting Divisors + Log Sum 5 | 6 | <i>Religious Observance</i> 7 | 8 |
| 9 | 99 & 2 10 <i>Quiz: Cantor's Theory of Infinite Sets</i> | 11 | Bigger Backwards 12 | 13 | Erasure 14 <i>Quiz: India's Prodigy, Ramanujan</i> | 15 |
| 16 | Quartic Polynomial 17 <i>Quiz: Emmy Noether's Theory of Rings</i> | 18 | <i>Scholars Symposium</i> Write-Up 2 Check 19 | 20 | Quintic Polynomials 21 <i>Quiz: De Méré's Problem of Points</i> | 22 |
| 23 | Integral Factors 24 <i>Quiz: the Traité du Triangle Arithmétique</i> | 25 | Presentations 26 | 27 | Odd Coin 28 <i>Quiz: Francesco Maurolico's Use of Induction</i> | 29 |
| 30 | | | | | | |

MAY 2023

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|--|---|---|---------------------------|--|----------|
| | Fruit Frenzy 1 Quiz: Laplace's Research in Probability Theory | 2 | Dice Game 3 | 4 | Spatial Delivery 5 Quiz: Mary Fairfax Somerville | 6 |
| 7 | Birthday Bonanza 8 Quiz: Daniel Bernoulli, Poisson, and Chebyshev | 9 | Digital Average of a Positive Integer 10 Write-Up 2 Due | 11 | Presentations 12 | 13 |
| 14 | <i>Final Exam Week</i> 15 | <i>Final Exam Week</i> 16 Final Exam 1:00 to 4:00 PM | <i>Final Exam Week</i> 17 | <i>Final Exam Week</i> 18 | <i>Final Exam Week</i> 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |