**Week-at-a-Glance: Arithmetic & Geometric Sequences (Sept 22–26, 2025) Algebra**

| **Day** | **Learning Target (LT)** | **Success Criteria (SC)** | **Activation of Learning (5 min)** | **Focused Instruction – I DO (10 min)** | **Guided Instruction – WE DO (10 min)** | **Collaborative Learning – Y’ALL DO (10 min)** | **Independent Learning – YOU DO (10 min)** | **Closing (5 min)** |
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| **Mon 9/22** | **LT:** I can identify what a sequence is and describe its terms. **SC1:** I can list the first few terms in a pattern. **SC2:** I can explain what a “term” means. | Teacher shows: 2, 4, 6, 8… asks: “What comes next?” (Think-Pair-Share). | Define sequence = list of numbers in order. Define “term.” Show counting & even number examples. | Together identify next terms: 5, 10, 15, ? ; 1, 3, 5, ? | Groups match strips: sequence + “next term.” | 4 practice problems (find next term). | Quick Write: “A sequence is…” |  |
| **Tue 9/23** | **LT:** I can describe arithmetic sequences using words, recursive, and explicit formulas. **SC1:** I can say the common difference. **SC2:** I can write the formula in words and numbers. | Money example: $2, $4, $6… ask: “How much next time?” | Define arithmetic = add same number. Recursive: “aₙ = aₙ₋₁ + d.” Explicit: “aₙ = a₁ + (n-1)d.” Use colors: a₁=first term, d=difference. | Together: 3, 6, 9… recursive = “next = last + 3.” Explicit = “aₙ=3+(n-1)3.” | Groups use number lines to build sequences and write recursive + explicit with teacher’s help. | 3 problems: write recursive & explicit for small sequences (teacher provides scaffold boxes). | Sentence stem: “In an arithmetic sequence we always \_\_\_.” |  |
| **Wed 9/24** | **LT:** I can describe geometric sequences using words, recursive, and explicit formulas. **SC1:** I can say the common ratio. **SC2:** I can write the formula in words and numbers. | Doubling: 1, 2, 4, 8… ask: “What happens each time?” (See-Think-Wonder). | Define geometric = multiply each time. Recursive: “aₙ = aₙ₋₁ × r.” Explicit: “aₙ = a₁ × rⁿ⁻¹.” Use colors: a₁=first, r=ratio. | Together: 2, 4, 8… recursive = “next = last × 2.” Explicit = “aₙ=2×2ⁿ⁻¹.” | Groups use counters: start at 1, multiply ×2 each time, then write recursive + explicit. | 3 problems: small geometric sequences with scaffold boxes. | Quick Write: “A geometric sequence means we always \_\_\_.” |  |
| **Thu 9/25** | **LT:** I can tell if a sequence is arithmetic or geometric and write both formulas. **SC1:** I can explain if it adds or multiplies. **SC2:** I can write recursive & explicit formulas correctly. | Show: 5, 10, 15… vs 2, 4, 8… Ask: “What’s the difference?” (Compare & Contrast). | Model checking: “If add → arithmetic. If multiply → geometric.” Show both formulas side by side. | Together: 4, 7, 10 (arithmetic) vs 3, 9, 27 (geometric). Write recursive & explicit as class. | Groups sort sequences into “A” or “G” and write formulas with teacher circulating. | 4 sequences (mix A & G). Students label type + write recursive & explicit. | *Reciprocal Teaching:* Students explain one sequence + formula to a partner. |  |
| **Fri 9/26** | **LT:** I can solve mixed sequence problems using recursive and explicit formulas. **SC1:** I can identify the type of sequence. **SC2:** I can use a formula to find the nth term. | Review game: flash sequence, class shouts “Add!” or “Multiply!” (Choral Response). | Model: 2, 5, 8… → arithmetic; recursive: “aₙ=aₙ₋₁+3”; explicit: “aₙ=2+(n-1)3.” Show how to find 10th term. | Solve 2 mixed examples as class (1 A, 1 G). Teacher checks understanding. | Jigsaw: each group solves one sequence fully (type, recursive, explicit), then teaches others. | Mini-quiz: 4 problems (mix A & G, write recursive & explicit, find 5th term). | *Socratic Seminar (structured):* “Which is easier to use: recursive or explicit? Why?” Students share using sentence stems. |  |