Lesson 4.5 Practice: Sequences as Functions

School Launch · Algebra I · Unit 4: Relations and Functions · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the 8th term of the arithmetic sequence $9, 7, 5, 3, \ldots$ EASY

2. Find the 8th term of the arithmetic sequence $-1, -3, -5, -7, \ldots$ EASY

3. Find the 8th term of the arithmetic sequence $-4, 1, 6, 11, \ldots$ EASY

4. Find the 36th term of the arithmetic sequence $-7, -1, 5, 11, \ldots$ MEDIUM

5. Find the 36th term of the arithmetic sequence $-10, -17, -24, -31, \ldots$ MEDIUM

6. Find the 19th term of the arithmetic sequence $10, 8, 6, 4, \ldots$ MEDIUM

7. Find the 26th term of the arithmetic sequence $-6, 3, 12, 21, \ldots$ MEDIUM

8. An arithmetic sequence begins $-3, -4, -5, -6, \ldots$ Write a rule for a_n and find a_{90}. Which term equals -98? HARD

9. An arithmetic sequence begins $-2, -1, 0, 1, \ldots$ Write a rule for a_n and find a_{42}. Which term equals 45? HARD

10. An arithmetic sequence begins $10, 13, 16, 19, \ldots$ Write a rule for a_n and find a_{76}. Which term equals 253? HARD