

Algebra I
1.1 Warm-Up #1
Sequences

Name: _____

Date: _____ Hour: _____

Objective:

- recognize, use and explain the pattern of a sequence

Directions: Write the next three terms of each sequence then describe the pattern for each.

1. 3, 7, 11, 15, _____, _____, _____, ... pattern: add 4

2. 7, 5, 3, 1, _____, _____, _____, ... pattern: _____

3. 2, 5, 8, 11, _____, _____, _____, ... pattern: _____

4. 4, 3, 2, 1, _____, _____, _____, ... pattern: _____

over

5. 3, 6, 12, 24, _____, _____, _____, ... pattern: _____

6. 5, -10, 20, -40, _____, _____, _____, ... pattern: multiply by -2

7. 800, 400, 200, 100, _____, _____, _____, ... pattern: _____

8. 1, 4, 9, 16, _____, _____, _____, ... pattern: add odd numbers starting with \square

9. $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4},$ _____, _____, _____, ... pattern: add one to the denominator

10. 1, 1, 2, 3, 5, 8, 13, _____, _____, _____, ... pattern: add the two previous terms together (Fibonacci sequence)