

Name: \_\_\_\_\_

Show work needed to justify your answer. Date: \_\_\_\_\_

**HW # 24:** Algebra 1 - Standard 13 - Arithmetic Sequence

5 points

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**ARGUMENTS** Determine whether each sequence is an arithmetic sequence. Justify your reasoning.

1.  $-3, 1, 5, 9, \dots$

2.  $\frac{1}{2}, \frac{3}{4}, \frac{5}{8}, \frac{7}{16}, \dots$

3.  $-10, -7, -4, 1, \dots$

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4.  $-12.3, -9.7, -7.1, -4.5, \dots$

5.  $4, 7, 9, 12, \dots$

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6.  $15, 13, 11, 9, \dots$

7.  $7, 10, 13, 16, \dots$

8.  $-6, -5, -3, -1, \dots$

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Find the common difference of each arithmetic sequence. Then find the next three terms.

10.  $6, 12, 18, 24, \dots$

11.  $21, 19, 17, 15, \dots$

12.  $-\frac{1}{2}, 0, \frac{1}{2}, 1, \dots$

13.  $2\frac{1}{3}, 2\frac{2}{3}, 3, 3\frac{1}{3}, \dots$

14.  $\frac{7}{12}, 1\frac{1}{3}, 2\frac{1}{12}, 2\frac{5}{6}, \dots$

18.  $-2, -5, -8, -11, \dots$

