

Name \_\_\_\_\_ Date \_\_\_\_\_

### 4.6 Practice Worksheet

1 – 6: Write the next three terms of the arithmetic sequence. Show all work for full credit.

1. 1, 8, 15, 22, ...

2. 20, 14, 8, 2, ...

3. 12, 21, 30, 39, ...

4. 5, 12, 19, 26, ...

5. 3, 7, 11, 15, ...

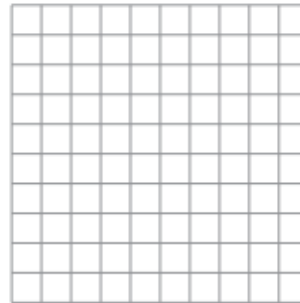
6. 2, 14, 26, 38, ...

7 – 12: Graph the arithmetic sequence.

7. 1, 3, 5, 7, ...

8. 9, 6, 3, 0, ...

9.  $\frac{15}{2}, \frac{13}{2}, \frac{11}{2}, \frac{9}{2}, \dots$



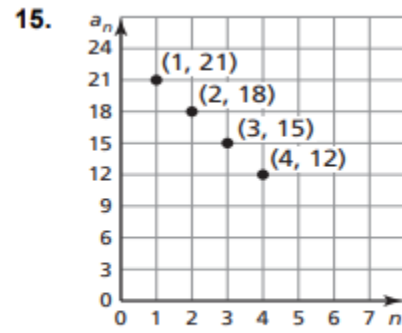
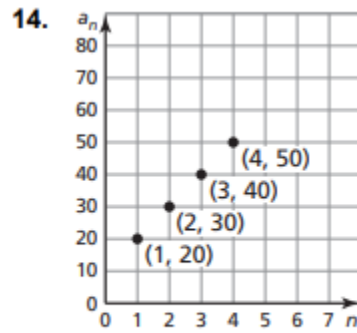
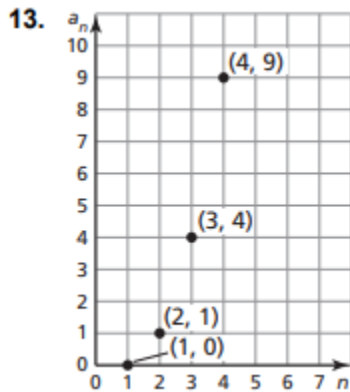
10. 1, 2.5, 4, 5.5, ...

11. 1, 4, 7, 10, ...

12.  $\frac{1}{4}, \frac{5}{4}, \frac{9}{4}, \frac{13}{4}, \dots$



13 – 15: Determine whether the graph represents an arithmetic sequence. Explain your answer in a complete sentence.



16 – 21: Write an equation for the  $n$ th term of the arithmetic sequence. Then find  $a_{10}$ . Show all work for full credit.

16.  $-5.4, -6.6, -7.8, -9.0, \dots$

17.  $43, 38, 33, 28, \dots$

18.  $6, 10, 14, 18, \dots$

19.  $-11, -9, -7, -5, \dots$

20.  $34, 37, 40, 43, \dots$

21.  $\frac{9}{4}, \frac{7}{4}, \frac{5}{4}, \frac{3}{4}, \dots$

22. In an auditorium, the first row of seats has 30 seats. Each row behind the first row has 4 more seats than the row in front of it. How many seats are in the 25th row?