

Name: _____

Date: _____

Common difference d . Formula: $a_n = a_1 + (n - 1)d$. Last two are challenge problems!

1. 5, 8, 11, 14, ... find d .

show your work

2. Same sequence: next two terms?

show your work

3. 20, 16, 12, ... find d .

show your work

4. $a_1 = 7$, $d = 5$. Find a_4 .

show your work

5. 2, 9, 16, ... find a_{10} .

show your work

6. $a_n = 4 + (n-1)(6)$. Find a_8 .

show your work

7. Is 7, 14, 28, 56 arithmetic?

show your work

8. Write the formula for 10, 13, 16, ...

show your work

9. An arithmetic sequence has $a_3 = 14$ and $a_7 = 30$. Find d and a_1 . * CHALLENGE

show your work

10. Theater rows: row 1 has 18 seats, each row adds 4. How many seats in row 12, and is a 62-seat row possible? * CHALLENGE

show your work