

HW #15 This will be collected tomorrow.

Example: **Generalize the formula for a_n .**

$$d = 12 \quad a_1 = 6$$

$$a_n = a_1 + (n - 1)d$$

$$a_n = 6 + (n - 1)(12)$$

$$a_n = 6 + 12n - 12$$

$$a_n = 12n - 6$$

Given the first term and common difference, find the generalized arithmetic formula for a_n .

1. $a_1 = 15, d = 9$

2. $a_1 = -10, d = 3$

3. $a_1 = 13, d = -4$

Given two terms along an arithmetic sequence, find the generalized arithmetic formula for a_n .

4. $a_{19} = 117 \quad a_{17} = 109$

5. $a_{21} = -2 \quad a_{15} = 28$

6. $a_7 = 53 \quad a_{32} = 203$