Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_

# Secondary Math I 10-1 Homework

# Arithmetic Sequences

*Find the next four terms in the arithmetic sequences.*

1. 5, 8, 11 … 2. –29, -19, -14…

*For the following sequences write the explicit and recursive rules.*

3. –4, -6, -8, -10 … 4. 87, 71, 58, 45…

d = \_\_\_\_\_ d = \_\_\_\_\_

Recursive: \_\_\_\_\_\_\_\_\_\_\_\_\_ Recursive: \_\_\_\_\_\_\_\_\_\_\_\_\_

Explicit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Explicit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. 19, 13, 7, 1… 6. 9, 17, 25, 33 …

 d = \_\_\_\_\_ d = \_\_\_\_\_

Recursive: \_\_\_\_\_\_\_\_\_\_\_\_\_ Recursive: \_\_\_\_\_\_\_\_\_\_\_\_\_

Explicit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Explicit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Given the recursive formula, write the explicit formula for the sequence.*

7. a1 = 8 8. t1 = -8

 an = an-1 - 4 tn = tn-1 + 2

*Given the explicit formula, write the recursive formula for the sequence.*

9. an = 4n + 3 10. tn =-2n - 4