

# 5.1 HW #4

SECONDARY MATH I // MODULE 1  
SEQUENCES - 1.4

READY, SET, GO! Name \_\_\_\_\_ Period \_\_\_\_\_ # \_\_\_\_\_

## READY

Topic: Use function notation to evaluate equations.

Evaluate the given equation for the indicated function values.

- |   |   |   |  |
|---|---|---|--|
| 1. $f(n) = 5n + 8$<br>$f(4) =$<br><br>$f(-2) =$ | 2. $f(n) = -2n + 1$<br>$f(10) =$<br><br>$f(-1) =$ | 3. $f(n) = 6n - 3$<br>$f(-5) =$<br><br>$f(0) =$ | 4. $f(n) = -n$<br>$f(9) =$<br><br>$f(-11) =$ |
| 5. $f(n) = 5^n$<br>$f(2) =$<br><br>$f(3) =$     | 6. $f(n) = 3^n$<br>$f(4) =$<br><br>$f(1) =$       | 7. $f(n) = 10^n$<br>$f(6) =$<br><br>$f(0) =$    | 8. $f(n) = 2^n$<br>$f(0) =$<br><br>$f(5) =$  |

## SET

Topic: Finding terms for a given sequence

Find the next 3 terms in each sequence. Identify the constant difference. Write a recursive function and an explicit function for each sequence. Circle where you see the common difference in both functions. (The first number is the 1<sup>st</sup> term, not the 0<sup>th</sup> term).

- |  |                             |
|--|-----------------------------|
| 9. A) 3, 8, 13, 18, 23, _____, _____, _____, ...     | B) Common Difference: _____ |
| C) Recursive Function: _____                         | D) Explicit Function: _____ |
| 10. A) 11, 9, 7, 5, 3, _____, _____, _____, ...      | B) Common Difference: _____ |
| C) Recursive Function: _____                         | D) Explicit Function: _____ |
| 11. A) 3, 1.5, 0, -1.5, -3, _____, _____, _____, ... | B) Common Difference: _____ |
| C) Recursive Function: _____                         | D) Explicit Function: _____ |

GO

Topic: Reading a graph

Olaf is a mountain climber. The graph shows Olaf's location on the mountain beginning at noon. Use the information in the graph to answer the following questions.

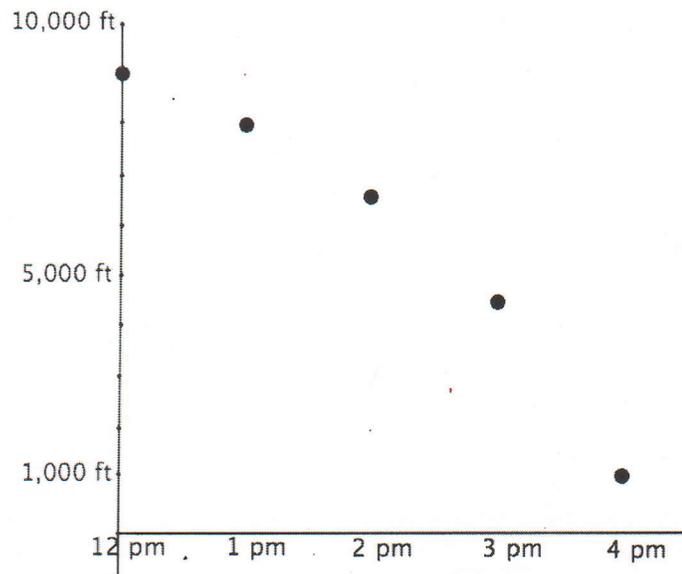
12. What was Olaf's elevation at noon?

13. What was his elevation at 2 pm?

14. How many feet had Olaf descended from noon until 2 pm?

15. Olaf reached the base camp at 4 pm. What is the elevation of the base camp?

16. During which hour was Olaf descending the mountain the fastest? Explain how you know.



17. Is the value of  $f(n)$  the time or the elevation?