

Unit 0 HW #12

1. Determine whether 447 is a term of each sequence below. If so, which term is it? [Help](#)

a. $t(n) = 5n - 3$

c. $t(n) = -6 + 3(n - 1)$

e. $t(n) = -8 - 7(n - 1)$

b. $t(n) = 24 - 5n$

d. $t(n) = 14 - 3n$

2. Find the sequence generator for each sequence listed below. Write an equation for the n^{th} term in each sequence below, keeping in mind that the first term of each sequence is $t(1)$. [Help](#)

a. 4, 7, 10, 13, ...

b. 3, 8, 13, ...

c. 24, 19, 14, ...

d. 7, 9.5, 12, ...

3. Great Amusements Park has been raising its ticket prices every year, as shown in the table below. [Help](#)

Year	Price
0	\$50
1	\$55
2	\$60.50
3	\$66.55

a. Describe how the ticket prices are growing.

b. What will the price of admission be in year 6?

4. Find the following products. [Help](#)

a. $(4x + 5)(4x - 5)$

b. $(4x + 5)^2$

5. Solve each system. [Help](#)

a. $6x - 2y = 10$
 $3x - 2 = y$

b. $3x - 9y = 3$
 $2x = 16 - y$