Algebra 2 March 20, 2020

1. Write an explicit formula for $a_n$, the $n^{\text{th}}$ term of the sequence $26, 16, 6, \ldots.$

2. Find the 9th term of the arithmetic sequence $-x + 9, 4x + 15, 9x + 21, \ldots$

3. Find the 7th term of the geometric sequence show below

$$8x^3, -16x^7, 32x^{11}, \ldots$$

4. If $a_1 = 3$ and $a_n = -3a_{n-1} + 2$ then find the value of $a_5$.

5. Write an recursive formula for $a_n$, the $n^{\text{th}}$ term of the sequence $45, 15, 5, \ldots$.

$a_1 =$ ☐

$a_n =$ ☐