

Quiz #9 - Exponential Functions

Name: _____ Class: _____

1. Find the tenth term in the sequence. **(2 points)**

$$a_n = \frac{2n+1}{n^3}$$

2. Find the first four terms in the sequence. **(2 points)**

$$a_n = na_{n-1}$$

$$a_1 = -1$$

For 3 – 8, fill in the missing information in the chart. **(7 points each)**

#	Sequence	Arithmetic or Geometric?	Explicit Formula	Recursive Formula	35 th Term
3.	-12, -9, -6, -3, 0, ...				
4.				$a_{n+1} = a_n \cdot 3, a_1 = -2$	
5.			$a_n = -163 + 200n$		

#	Sequence	Arithmetic or Geometric?	Explicit Formula	Recursive Formula	35 th Term
6.				$a_n = a_{n-1} + \frac{2}{3}, a_1 = 5$	
7.	-1, 6, -36, 216, ...				
8.			$a_n = 2 \cdot \left(\frac{1}{4}\right)^{n-1}$		

9. If you invest \$4,600 in the bank with interest that is compounded annually at a rate of 3% per year, how much would you have after 7 years? **(4 points)**