1.(1 pt) Find the common ratio and write out the first four terms of the geometric sequence $\left\{ \frac{8^{n+2}}{3} \right\}$

Common ratio is _____

$a_1 =$_____ , $a_2 =$_____ , $a_3 =$_____ , $a_4 =$_____

2.(1 pt) Find the 5^{th} term of the geometric sequence $3, 9, 27, \ldots$

Answer: _____

3.(1 pt) Find the nth term of the geometric sequence whose initial term is 8 and common ration is 6.

_____ (Your answer must be a function of n.)

4.(1 pt) Alex and Kate want to purchase a house. Suppose they invest 500 dollars per month into a mutual fund. How much will they have for a downpayment after 5 years if the per annum rate of return of the mutual fund is assumed to be 10.5 percent compounded monthly?

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