1. Find the 9th term of the sequence 2,6,18,54,…	2. Find a formula for the nth term 500,100,20,4,…
3. Find *r* for the sequence that has $a_1 = 4$ and $a_6 = 972$.	4. 1,-3,9,-27,…Find a_9.
5. Find n for the geometric sequence that has $a_n = 96$ and $a_1 = -3$ and *r*= - 2.	6. Find the 11th term of a geometric sequence if $a_3 = 2187 \ and \ a_8 = 9$

7. Find a_{20} in the sequence $y, y^3, y^5, \dots$	8. Find a formula for the nth term of the sequence 64,-48,36,-27,…
9. Find the 9th term of a geometric sequence if $a_3 = -12 \ and \ a_6 = 96$.	10. 320,80,20,5,…find a_8.

ANSWERS:

1. 13,122

2. $a_n = 500 \left(\frac{1}{5}\right)^{n-1}$

3. 3

4. 6,561

5. 6

6. $\frac{1}{3}$

7. y^{39}

8. $a_n = 64 \left(-\frac{3}{4}\right)^{n-1}$

9. -768

10. $\frac{5}{256}$