LEARNING AS ONE NATION

Expanded Project

L E A R N I N G A C T I V I T Y

Math 10_14

Name: _____ **Grade/Score:** _____

Year and Section: _____ **Date:** _____

Subject *(Check or choose from below.)*_____

- ☐ Religion/Values Education
- ☐ Natural Sciences
- ☐ Araling Panlipunan
- ☐ Filipino
- ☐ English
- ☐ Math
- ☐ TLE / ICT
- ☐ MAPEH

Type of Activity *(Check or choose from below.)*_____

- ☐ Concept Notes
- ☐ Skills: Exercise / Drill
- ☐ Laboratory Report
- ☐ Illustration
- ☐ Formal Theme
- ☐ Informal Theme
- ☐ Others: _____

Activity Title: Exercises on Geometric Sequences (Self-assessment)

Learning Targets: To solve problems involving geometric sequences.

References: *(Author, Title, Pages)* V. J. A. Dublin, D. J. Acedo and J. E. Mangyao, CVIF Learning Activities

I. Find the common ratio of the following sequences. Show your step-by-step solutions.
(3 points each)

a) $3,\ 15,\ 75,\ 375, \ldots$

b) $16,\ -4,\ 1,\ -\frac{1}{4}, \ldots$

c) A geometric sequence with 117 as the third term and 3159 as the sixth term.

d) A geometric sequence with 44 as the second term and 2816 as the fifth term.

II. Find the nth term of the following sequences. Show your step-by-step solutions.
(4 points each)

a) $20,\ 10,\ 5, \ldots$ $(a_7 =$ _____$)$

b) $a_1 = 12$ and $r = 4$ $(a_8 =$ _____$)$

III. Give the geometric sequence up to the 8th term if the second term is 28 and the fourth term is 1372. Show your step-by-step solutions.
(5 points)