LEARNING AS ONE NATION
Expanded Project

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

Math 10_6

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: Geometric Sequences

Learning Targets: To identify and give examples of a geometric sequence.

References: *(Author, Title, Pages)*
M. J. Acelado, et al., Algebra, pp. 413-417
V. G. Baja, CVIF Learning Activities

A <u>geometric sequence</u> is a sequence of numbers where every term after the first term is obtained by multiplying the preceding term by the <u>*common ratio*</u>.

Examples of geometric sequences:

$4,\ 12,\ 36, \ldots$ (The common ratio is 3 since $\frac{12}{4} = 3$ and $\frac{36}{12} = 3$.)

$2a,\ 6a^2,\ 18a^3, \ldots$ (The common ratio is $3a$ since $\frac{6a^2}{2a} = 3a$ and $\frac{18a^3}{6a^2} = 3a$.)

Exercises:

1. Verify the common ratio for the geometric sequences given above. Do this by multiplying each term by the common ratio. What do you get?
2. Determine the fourth and fifth terms of each sequence.