LEARNING AS ONE NATION
Expanded Project
L E A R N I N G A C T I V I T Y

Math 10_3

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: **Arithmetic Means**

Learning Target: **To determine the arithmetic mean of the given values.**

References: *(Author, Title, Pages)*
1) F. B. Orines, et al., Next Century Mathematics, pp. 23-25
2) V. J. A. Dublin and M. V. Bernido, CVIF Learning Activities

For an arithmetic sequence, the terms that are between two given terms are sometimes called *arithmetic means*.

Example 1: In the arithmetic sequence 2, 4, 6, 8, there are two arithmetic means between 2 and 8. These are 4 and 6.

Example 2: Insert two arithmetic means between 4 and 16.

Solution: Write the arithmetic sequence as,

4, ___, ___, 16

First, we need to find the common difference d between consecutive terms of the sequence. We know that,

4, 4 + d, (4 + d) + d, 16

while [(4 + d) + d] + d = 16.

Thus, we have the equation to be solved for d:

$$4 + 3d = 16$$
$$3d = 16 - 4$$
$$d = \frac{12}{3} = 4.$$

Substituting the value of d in the terms of the sequence gives,

4, 4 + 4, (4 + 4) + 4, 16

or 4, 8, 12, 16

Therefore, the arithmetic means between 4 and 16 are 8 and 12.

Exercises:

1) What is the arithmetic mean between 44 and 55 ?
2) Insert four arithmetic means between 16 and 56.