MATHEMATICS 5

Modified In-School Off-School Approach Modules (MISOSA)

Distance Education for Elementary Schools

SELF-INSTRUCTIONAL MATERIALS

LEAST COMMON MULTIPLES

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Revised 2010

by the Learning Resource Management and Development System (LRMDS),
DepEd - Division of Negros Occidental
under the Strengthening the Implementation of Basic Education
in Selected Provinces in the Visayas (STRIVE).

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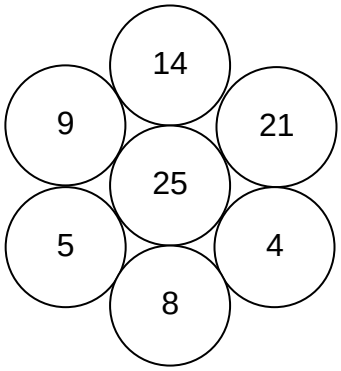
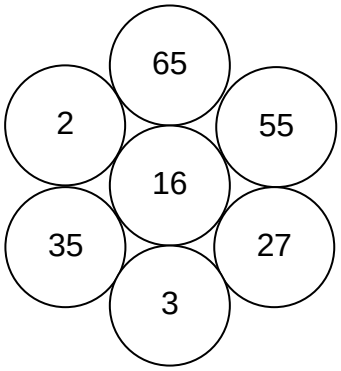
LEAST COMMON MULTIPLES

Objective: Find the least common multiple of a set of numbers

Review

Look at the two flowers. Write the numbers in the box if the number printed on the petal is multiple of 2. In the triangle if multiple of 3 and in the circle if multiple of 5.





Check your work. If you scored 12 or 15, you are ready for the next lesson. If you scored 11 or below, review the past lessons.

Study and Learn

The skill of finding the least common multiple is needed when you add or subtract dissimilar fractions. Thus, it is important to learn this skill.

Look at the set of numbers below and their multiples.

3 – 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

6 – 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

9 – 9, 18, 27, 36, 45, 54, 63, 72, 81, 90

3, 6, 9, 12, 15, 18, 21, 24, 27, 30 are multiples of 3. What are the multiples of 6? 9?

Look at the multiples of the three numbers. Which multiples are common? *18* If we continue to list down the multiples of these, will it be possible that they'll have common multiples?

Since 18 is the first common multiple, we call 18 the **least common multiple**.

Try another set of numbers:

4 - 8, 12, 16, 20, 24
5 - 10, 15, 20, 25, 30
10 - 20, 30, 40, 50, 60

What is the least common multiple of 4, 5 and 10? *20*

Try These

Do what is asked.

1. a. List the multiples of 2.
   b. List the multiples of 3.
   c. List the multiples of 4.
   d. What is the least common multiple of 2, 3 and 4?

2. What are the multiples of 5?
   What are the multiples of 6?
   What are the multiples of 10?
   What is the least common multiple?

Wrap Up

The least common multiple (LCM) of two or more numbers is the smallest non-zero number that is common multiple to all of them.

On Your Own

Give the least common multiples of each set of numbers.

1) 2
   5
   10
   LCM ____

2) 3
   6
   4
   LCM ____

3) 5
   4
   10
   LCM ____

4) 3
   4
   9
   LCM ____

5) 2
   6
   9
   LCM ____

Check your answer with the answer key. If you get…

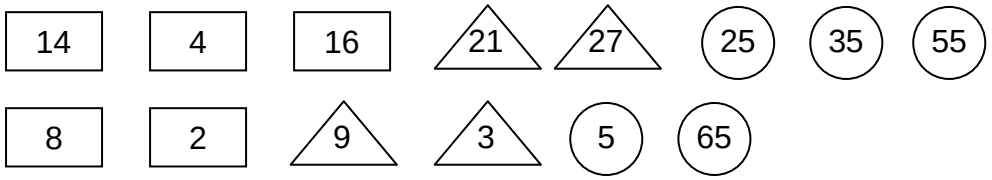
4-5 - Excellent! You can now proceed with the next lesson

3-2 - Poor! You need to review the processes you missed

0-1 - Very Poor! You need to repeat the whole process. Ask your teacher or elder to help you.

Key to Correction
LEAST COMMON MULTIPLES

REVIEW



TRY THESE

1) 2 = 2, 4, 6, 8, 10, 12
   3 = 3, 6, 9, 12, 15
   4 = 4, 8, 12, 16
   The least common multiple of 2, 3 and 4 is 12.

2) 5 = 5, 10, 15, 20, 25, 30, 35
   6 = 6, 12, 18, 24, 30, 36
   10 = 10, 20, 30, 40, 50
   The least common multiple of 5, 6 and 10 is 30.

ON YOUR OWN

1) 10
2) 12
3) 20
4) 36
5) 18