

Lesson 9d: Least Common Multiple

Objective: Write Common multiples and the least common multiple of two or more numbers.

Complete in your journal.

Warm-up: Math Minute

Learn About It:

1. Multiple – the product of any number and any counting number
2. Least common multiple (LCM) – the smallest (or least) common multiple of two or more numbers

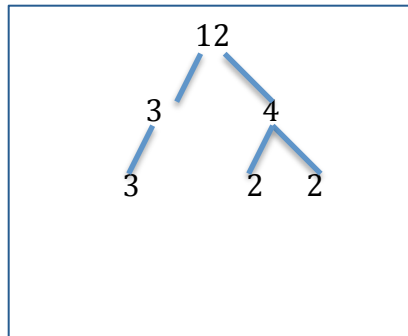
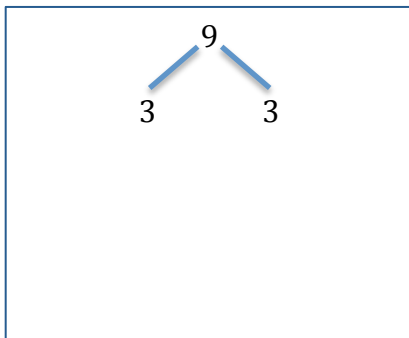
Two Methods. Example using 9 and 12

- 1) You can make a list
 - a) List the first 5 multiples of each number.
 - b) Identify common multiples.
 - c) Compare to find the least common multiple.
- 2) You can use prime factorization
 - a) Make factor trees for 32 and 40.
 - b) Identify all the common prime factors.
 - c) Find the product of all the factors using each common factor only once.

Multiples of 9: 9, 18, 27, 36, 45
Multiples of 12: 12, 24, 36, 48, 60

The common multiple is 36

The least common multiple of 9 and 12 is 36.



$$9 = 3, 3$$
$$12 = 3, 2, 2$$

The LCM is $3 \times 3 \times 2 \times 2 = 36$

Practice 9.3

Homework: 9.3

App of the Day:

Factor Samurai

Panasonic Prime Smash

Prime Numbers

GCF

