

Objectives 3 & 4 (Cake Method)

Find the Greatest Common Factor of Two Whole Numbers

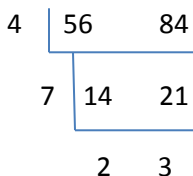
Vocab:

Greatest Common Factor (GCF): Factors of a number are whole numbers that can be multiplied together to get that number. The greatest common factor is the *greatest number that is a factor* of two or more numbers

Least Common Multiple (LCM): a number that is the *smallest* multiple of two or more numbers

Example 1: What are the Greatest Common Factor and Least Common Multiple for 56 and 84?

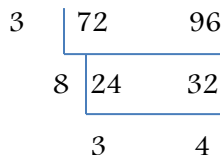
Cake Method for GCF and LCM



For Greatest Common Factor- multiply outside numbers only:
 $4 \times 7 = 28$

For Least Common Multiple- multiply side numbers AND bottom numbers
 $4 \times 7 \times 2 \times 3 = 168$

Example 2: What are the GCF of 72 and 96?



GCF = $3 \times 8 = 24$

LCM = $3 \times 8 \times 3 \times 4 = 288$

Guided Practice 1: What are the GCF and LCM of 66 and 99?

Guided Practice 2: What is the GCF and LCM of 18 and 81?

Independent Practice: Find the GCF and LCM of the following pairs of numbers. *Show your work!*

1. 6 and 8? _____
2. 50 and 30? _____
3. 84 and 92? _____
4. 15 and 6? _____
5. 40 and 16? _____
6. 56 and 84? _____
7. 90 and 65? _____
8. 15 and 60? _____

Additional Help:

- <http://www.showme.com/sh/?h=Dj22U9g>
<http://www.screenr.com/iWm7>