

## What is GCF?

The Greatest Common Factor of a set of numbers is the \_\_\_\_\_ number that goes evenly into a set of numbers.

You can use

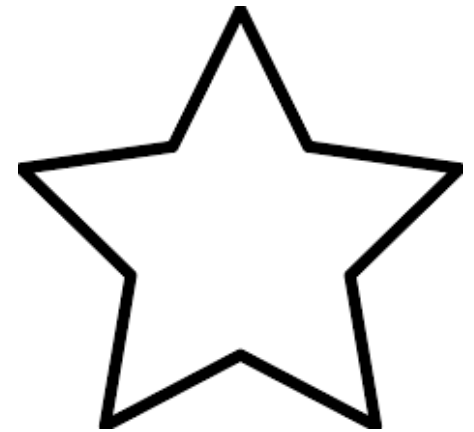
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to find the GCF of a set of numbers.

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### Finding GCF:

- 1) Make a factor tree for each number.
- 2) Organize the factors into the Venn Diagram.
- 3) Multiply the common factors together. That is your GCF.

**G**REATEST  
**C**OMMON  
**F**ACTOR



### Example 1:

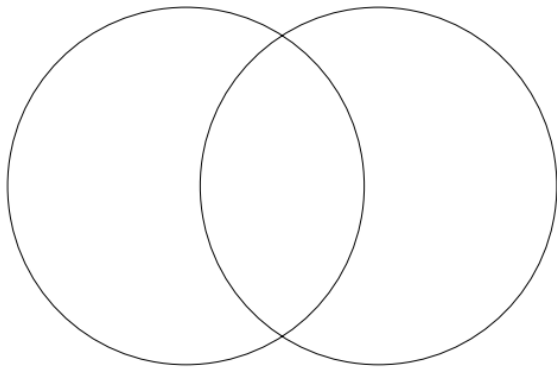
Find the GCF between 15 and 60.

1) Use a factor tree to factor 15 and 60.

**15**

**60**

2) Organize the factors into the Venn Diagram.



GCF: \_\_\_\_\_

### Example 2:

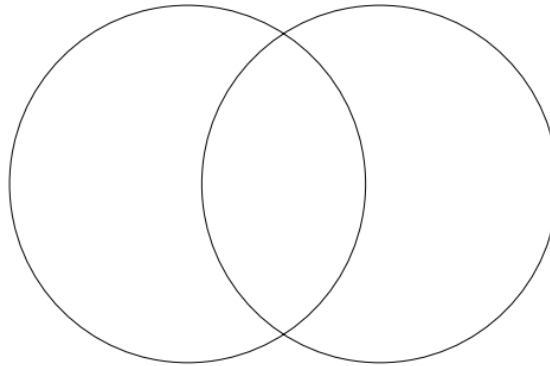
Find the GCF between 36 and 90.

1) Use a factor tree to factor 36 and 90.

**36**

**90**

2) Organize the factors into the Venn Diagram.



GCF: \_\_\_\_\_

### Example 3:

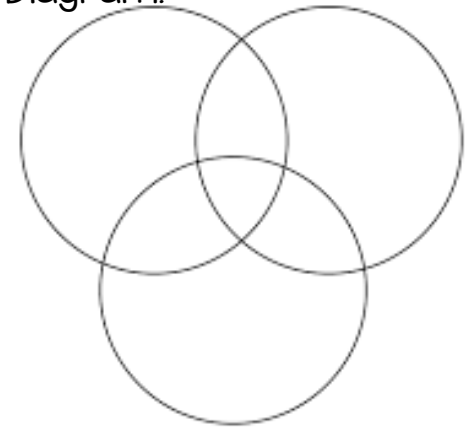
Find the GCF between 18, 24, 30

**18**

**24**

**30**

2) Organize the factors into the Venn Diagram.



GCF: \_\_\_\_\_

## What is LCM?

The Least Common Multiple of two numbers is the \_\_\_\_\_ number that is a multiple of both.

You can use

\_\_\_\_\_ to find the LCM of a set of numbers.

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### Finding LCM:

- 1) Find the prime factorization of each number.
  - 2) Organize the factors into the Venn Diagram.
  - 3) Multiply **all** the numbers together. That is your LCM.
- OR

- 1) For each number listed, **circle** the most repeated occurrence of this number in any prime factorization.
- 2) Multiply all the circled numbers.

*Glue  
Here*

**L** **E** **A** **S** **T**  
**C** **O** **M** **M** **O** **N**  
**M** **U** **L** **T** **I** **P** **L** **E**



Name \_\_\_\_\_

Date \_\_\_\_\_

### Example 1:

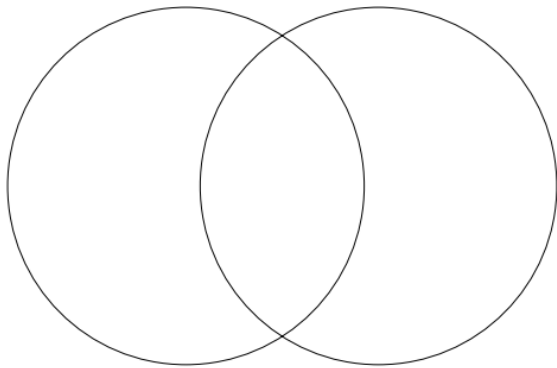
Find the LCM between 18 and 24.

1) Use a factor tree to factor 18 and 24.

18

24

2) Organize the factors into the Venn Diagram.



LCM: \_\_\_\_\_

### Example 2:

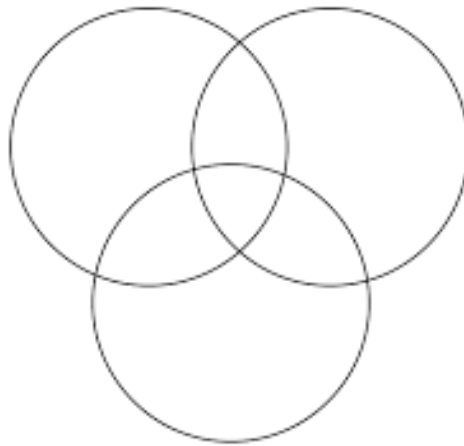
Find the LCM between 45, 30, 60

30

45

60

2) Organize the factors into the Venn Diagram.



LCM: \_\_\_\_\_

### Example 3:

Find the LCM between:

63

42

2) For each number listed, circle the most repeated occurrence of this number in any prime factorization.

3) Multiply all the circled numbers together

LCM: \_\_\_\_\_