Greatest Common Factor

The largest (Greatest) number that divides (Factor) into both (Common) terms.
Least Common Multiple

The smallest (Least) number that is divisible by (Multiple) both (Common) terms.
Upside down Cake Method...

**Greatest Common Factor:**

The largest number that divides evenly into both terms.

| Ex. 1 | 48 | 18 |
Upside down Cake Method….  

Step 1: Think of any number than divides evenly into both…  

Ex. 1 [□] 48 18
Upside down Cake Method....

Divide each term by that number!!

Ex. 1 2 48 18
Upside down Cake Method....

Put the answer after you divide under the cake!

Ex. 1 2 \underline{48 18}

\underline{24 9}
Upside down Cake Method...

Make a new cake and check if there is another number than will divide into both terms. Check if there is another number than will divide into both terms.

Ex. 1

2

48

24

18

9
Upside down Cake Method....

Make a new cake and check to see if there is another number than will divide into both terms.

Ex. 1

\[
\begin{array}{c|cc}
& 2 & 48 & 18 \\
\hline
3 & 24 & 9 \\
\end{array}
\]
Upside down Cake Method....

Nothing divides into 8 and 3, so you are done!!

Now to use this information to find the LCM/GCF

Ex. 1

\[ \begin{array}{ccc}
2 & 48 & 18 \\
3 & 24 & 9 \\
& 8 & 3 \\
\end{array} \]
Upside down Cake Method....

**GCF:**
Multiply the numbers that you divided out together... this is your GCF!!

**Mult.** The numbers in the box!

Ex. 1

```
2  48  18
3  24  9
```

8  3
Upside down Cake Method....

GCF:
Multiply the numbers that you divided out together... this is your GCF!!

**Mult. The numbers in the box!

Ex. 1

2
3

48 18
24 9

8 3

3 \cdot 2 = 6

GCF: 6
Upside down Cake Method....

**LCM:**
We use the same information, only now we multiply all the number not inside the cake!!

Ex. 1

\[
\begin{array}{ccc}
2 & 48 & 18 \\
3 & 24 & 9 \\
8 & 3 \\
\end{array}
\]
Upside down Cake Method....

**LCM:**

We use the same information, only now we multiply all the number not inside the cake!!

Ex. 1

```
<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>48</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>24</td>
<td>9</td>
</tr>
</tbody>
</table>
```

```
LCM = 2 • 3 • 8 • 3
LCM = 144
```
The largest (Greatest) number that divides (Factor) into both (Common) terms.

* This will be the smaller number of the two answers you find using this method.
Least Common Multiple

The smallest (Least) number that is divisible by (Multiple) both (Common) terms.

* This will be the larger number of the two answers you find using this method.
Your Turn...Start baking your cake!

Find the GCF and the LCM.

Ex 2. 105 75

GCF:
LCM:
Find the GCF and the LCM.

Ex 2.  5  105  75

3  21  15

7  5

GCF : 5 • 3 = 15

LCM:  5 • 3 • 7 • 5 = 525