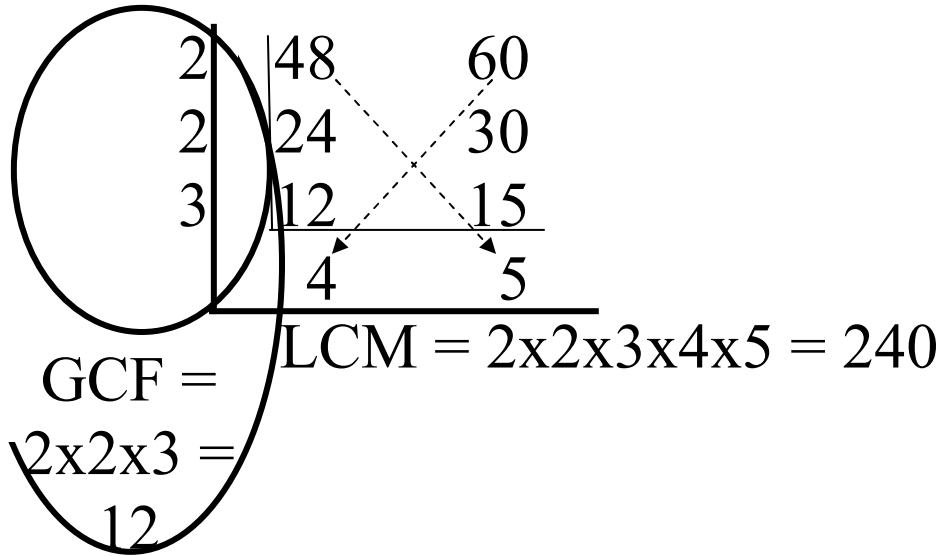


Finding LCM and GCF

In order to find the Least Common Multiple and Greatest Common Factor of two numbers, follow this pattern:

1. Write the numbers horizontally.
2. To the left of the numbers, place a common divisor.
3. Below the numbers, place the quotients of the division.
4. Continue this process until the quotients have no common divisors.
5. Circle the common divisors and continue the tail of the circle to make a "g."
6. Write the divisors in the bottom loop of the g, and multiply them to get the GCF.
7. Draw a vertical line by the common factors, then a connecting horizontal line under the last quotients, forming an L.
8. Under the horizontal line, multiply the common factors and final quotients. This will be the LCM.

Example: (Using 48 and 60.)



The final quotient tells us how many times the GCF goes into each number. For example, $48 \div 12 = 4$ and $60 \div 12 = 5$. This enables us to reduce fractions. The GCF is the highest number which will reduce both numbers.

$$\frac{48}{60} \div \frac{12}{12} = \frac{4}{5}$$

The opposite final quotient (follow the dotted arrows) tells us how many times each number goes into the LCM. So $240 \div 48 = 5$ and $240 \div 60 = 4$. This enables us to add or subtract fractions. If we use the two original numbers as denominators, the final quotients are the multipliers we need to get our LCM, which is now our LCD (The LCM of your D is the LCD).

$$\begin{array}{r} \frac{1}{48} \times \frac{5}{5} = \frac{5}{240} \\ + \frac{1}{60} \times \frac{4}{4} = \frac{4}{240} \end{array} = \frac{9}{240} = \frac{3}{80}$$