9/19 Least Common Multiple (LCM)

Multiple - the product of a # and another whole #

LCM - the smallest of the common multiples of a set of #'s

Multiples of 3 - 0, 3, 6, 9, 12, 15, 18, ... (never finish)

factors of 3 - 1, 3 (finished)

Multiples of 8 - 0, 8, 16, 24, 32, 40, 48, ...

factors of 8 - 1, 2, 4, 8

Is 10 a multiple of 5? yes

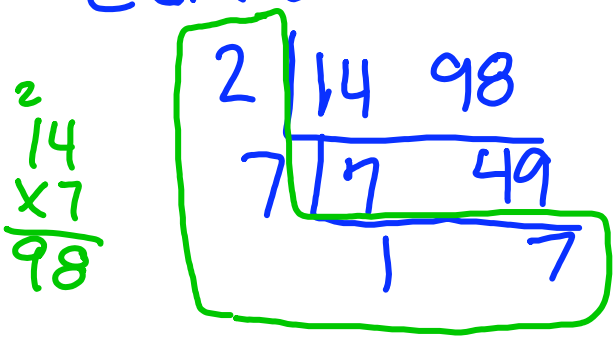
51 ; 3 ? Y

100 ; 25 ? Y

100 ; 8 ? N

24 ; 9 ? N

LCM of 14 and 98

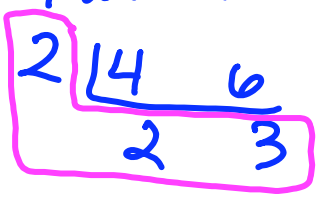


"GCF is on the left"

LCM makes an L

LCM = 2·7·1·7 = 98

4 and 6

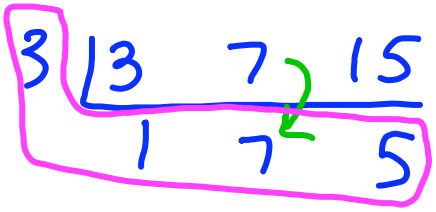


LCM = 2 · 2 · 3 = 12

? | 3 5 7

LCM = 3 · 5 · 7 = 105

15
x 7
105



LCM = 3 · 1 · 7 · 5 = 105

* For LCM, if a prime # can be factored out of 2 of the #'s, you can continue!

4, 6, 9

2 | 4 6 9
3 | 2 3 9
  | 2 1 3

LCM = 2 · 3 · 2 · 1 · 3 = 36

3 | 4 6 9
2 | 4 2 3
  | 2 1 3

LCM = 3 · 2 · 2 · 1 · 3 = 36

10, 35, 40

5 | 10 35 40
2 | 2 7 8
  | 1 7 4

LCM = 5 · 2 · 1 · 7 · 4 = 280

10 · 28