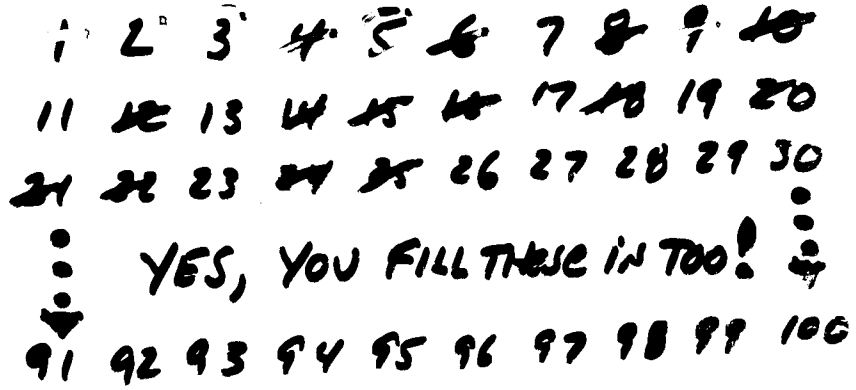
BE-1B TUESDAY 11-14-06

① MAKE A 10 NUMBER by 10 NUMBER table that lists ALL numbers from 1 to 100. Like THIS:



② Cross out 1, it is NOT prime or composite

③ Circle 2, then cross out ALL multiples of 2, Ex) 4, 6, 8, 10, ... since these are NOT prime.

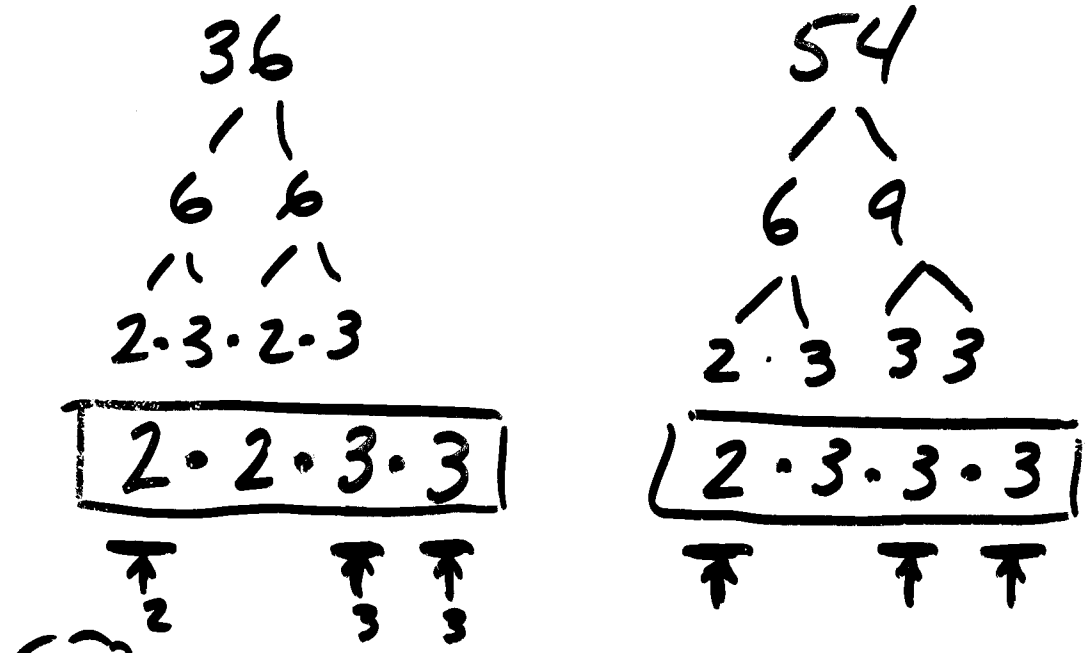
④ Circle 3, cross out All remaining multiples of 3.

⑤ Circle 5, etc. CONTINUE WITH NEXT ODD prime UNTIL YOU CAN'T go on.

SIEVE of Eratosthenes

WHAT IS THE biggest number that will go EVENLY INTO 36 AND 54?

HERE IS HOW TO find it USING factor trees.



THESE ARE THE COMMON PRIME FACTORS

$2 \cdot 3 \cdot 3 = 18$ THIS IS THE GCF

GREATEST COMMON FACTOR

LOOK AT x^2y AND xy^2z

WHAT IS THE GCF?

x^2y → $x \cdot x \cdot y$

xy^2z → $x \cdot y \cdot y \cdot z$

(T) COMMON FACTORS: x, y

GCF IS xy

FIND THE GCF OF

$36x^2y$ AND $54xy^2z$

GCF = $18xy$ ← EX 5 Page 476

IF 2 MONOMIALS DO NOT HAVE ANY COMMON FACTORS, THEY ARE CALLED

"RELATIVELY PRIME"

(IN RELATION TO EACH OTHER)

Practice (find the GCF)

1. $12, 18$
2. $4x^3y^2, 10x^2y$
3. $5x^5, 20x^3$
4. $2x^4y^2, 8xy^2, 12x^3y$

Pg. 477 # 13 to 18
