

Name: Algebra Summary Sheets

Ages: 12+

Awards:



Description: Nope, this is not a learning book. This book is used after instruction. These poster help visually summarize what is usually covered in pre-algebra and algebra class. It is very helpful for those going on into geometry or algebra 2 classes. Good for grades 6 on up. (also covers metrics, fractions, and integer rules)

What I saw were kids that at the end of the year (or even the middle!) had forgotten what they had been taught at the beginning of the year. Shoot, they would even forget what we did last week!

But, I don't blame them - we covered a LOT! But, what I knew they needed was just a concise summary of the procedure or skill. This is it.

Yes, this is, for sure, good when taking an algebra class. But, it was SO helpful for geometry students! If you remember, most all of the geometry situations and problems turn into...an algebra problem! And, yep, the geometry students would always get stuck there! This helped TREMENDOUSLY!

Sample:

GCF Greatest Common Factor	VS	LCM Least Common Multiple
Factor : A number that multiplies or divides EVENLY into another.		Multiple : A number produced by multiplying a number.
Example: Factors of 12 = 1, 2, 3, 4, 6, 12		Example: Multiples of 12 = 12, 24, 36...
*You <u>MUST</u> know how to PRIME FACTOR using POWERS!		
Finding GCF of numbers: 1. Prime factor each number. 2. Use the LESSER power of the COMMON factors (bases). Examples: $40 = 2^3 \cdot 5^1$ $60 = 2^2 \cdot 3^1 \cdot 5^1 \rightarrow \text{GCF} = 2^2 \cdot 5^1 = 20$ $6a^3b = 2 \cdot 3 \cdot a^3 \cdot b$ $4a^2b = 2^2 \cdot a^2 \cdot b \rightarrow \text{GCF} = 2 \cdot a^2 \cdot b = 2a^2b$		Finding LCM of numbers: 1. Prime factor each number. 2. Use the GREATEST power of the EACH factors (bases). Examples: $12 = 2^2 \cdot 3$ $40 = 2^3 \cdot 5 \rightarrow \text{LCM} = 2^3 \cdot 3 \cdot 5 = 120$ $6a^2 = 2 \cdot 3 \cdot a^2$ $18a^3b = 2 \cdot 3^2 \cdot a^3 \rightarrow \text{LCM} = 2 \cdot 3^2 \cdot a^3 = 18a^3$
*GREATEST common factor = <u>Least Powers</u> ; <u>LEAST</u> common multiple = <u>GREATEST Powers</u>!		

LINEAR EQUATIONS: 3 FORMS	
Standard Form : $Ax + By = C$ or $Ax + By + C = 0$ To find X intercept, set Y to 0, solve for X To find Y intercept, set X to 0, solve for Y	Great for quick & easy X and Y intercepts! Graphs made FAST!
Slope-Intercept Form : $y = mx + b$ $m = \text{Slope}$ $b = \text{y-intercept}$	Great for comparing SLOPES! Parallel? Perpendicular?
Point - Slope Form : $y - y_1 = m(x - x_1)$ or $y = m(x - x_1) + y_1$	Not really good for much but, it's another form that many like.