Greatest Common Factor

- GCF
 - As small as or smaller than the smallest number given in the question
 - You can list all of the factors and find the biggest one they have in common
 - Take all the variables they have in common to the SMALLEST exponent given in the question

Ex. 1) GCF

 $6x^2yz^4 \qquad 30x^4y$

What is the greatest common factor (GCF) of the monomials shown above?

0/1.6

30 1.30 2.15 3.10 5.6) GCF= 6224

Exponents they have in ammon with smallest exponent

Ex. 2 GCF

$$3x^2y^4$$
 $33xy^2$

What is the greatest common factor (GCF) of the monomials shown above?



- D. 3x²y⁴

- $\frac{3}{1.3}$ $\frac{33}{1.33}$ $\frac{3}{3.11}$ $\frac{3}{6}$ $\frac{3}{1.33}$

Ex. 3) GCF

$$21x^3y^4$$
 $6x^2y^2$ $3x^4y^3$

What is the greatest common factor (GCF) of the monomials shown above?

What is the greatest common factor (GCF) of the monomials show
$$\frac{21}{1\cdot 21}$$
 $\frac{6}{1\cdot 5}$ $\frac{3}{1\cdot 3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$

Ex. 4) GCF

$$6x^4y^4$$
 $30x^4y^4$ $6x^5y^5$

What is the greatest common factor (GCF) of the monomials shown above?

GCF

Ex.5)

Ex. 6)

 $78x^3y^2$ $30x^4y^2$

 $52x^2y^4z^4$ $20xy^4z^3$

What is the greatest common factor (GCF) of the monomials shown above?

What is the greatest common factor (GCF) of the monomia's shown above?

78 30 A. $260x^2y^4z^4$ 1.78 1.30 B. $4x^2y^4z^4$ 2.39 2.15 C. $260x^3y^8z^6$

Ex. 7)

The greatest common factor (GCF) of $x^{2k}y^6$ and x^7y^k is x^7y^4 . What is the value of k?

A.
$$1=K$$

B. $4=K$

C. $8=K$

D. $20=K$
 χ^2
 χ

Ex. 8) LCM

Look at the two monomials below.

$$27x^3y^2$$
 $15x^3y^4$

LCM = 135 x3,4 All variables. Riggest exponents

Least Common Multiple

- LCM
 - This number is as big as or bigger than the biggest number given in the question
 - You can multiply the numbers and finding the smallest one they have in
 - . Take all of the variables to the BIGGEST exponent

Ex. 9) LCM

Look at the two monomials below.

 $108u^2v^4w^2$ $60u^4v^4w^3$

What is the least common multiple (LCM) of the monomials shown above?

A. 1218v8w5

X12-108=0.1

C. 54006v8w5

540-108=5

540 - 60 = 9

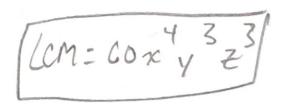
LCM-5404 DW3

Ex. 10) LCM

Look at the three monomials below.

$$12x^3y^2z \quad 20x^4y^3z^3 \quad 20x^3y^2$$

What is the least common multiple (LCM) of the monomials shown above?



Ex. 11) LCM

Look at the three monomials below.

 $\chi^2 \gamma^3 \neq 4$

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$$108x^2y^3z^2$$
 $60x^2y^3z^4$ $20xy^2z$

What is the least common multiple (LCM) of the monomials shown above?

A. $12x^2y^3z^2$

B. 12x2y3

C. $540x^4v^6z^6$

D. $540x^2y^3z^4$