

ELEMENTARY ALGEBRA  
 UNIT 21 - EXPRESSIONS (REVIEW)  
 21.5 - GREATEST COMMON FACTOR

NAME \_\_\_\_\_

PERIOD \_\_\_\_

ASSIGNMENT \_\_\_\_

The **GCF (GREATEST COMMON FACTOR)** of two terms is the **BIGGEST** factor that will **DIVIDE EVENLY** into each.

Find the GCF of:

\*1.  $6x^2y$  and  $12y^2$  { First, factor each term

$2 \cdot 3 \cdot x \cdot x \cdot y$  and  $2 \cdot 2 \cdot 3 \cdot y \cdot y$

$2 \cdot 3 \cdot x \cdot x \cdot y$  and  $2 \cdot 2 \cdot 3 \cdot y \cdot y$  { List the common factors.

$2 \cdot 3 \cdot y = 6y$

\*2.  $8ab^2$  and  $20a^2b^3$

$2 \cdot 2 \cdot 2 \cdot a \cdot b \cdot b$  and  $2 \cdot 2 \cdot 5 \cdot a \cdot a \cdot b \cdot b \cdot b$

$2 \cdot 2 \cdot a \cdot b \cdot b$  and  $2 \cdot 2 \cdot 5 \cdot a \cdot a \cdot b \cdot b \cdot b$

$2 \cdot 2 \cdot a \cdot b \cdot b = 4ab^2$

3.  $9x^2y$  and  $12x^2y^2$

4.  $4x$  and  $12x^2y$

5.  $6xy$  and  $12x^2y$

Find the GCF of:

6.  $10b^2$  and  $25a^2b$

7.  $10ab$  and  $12ab^3$

8.  $12ab^2$  and  $15a^2b$

9.  $18a^2b^2$  and  $15ab^3$

10.  $18a^2b^3$  and  $12a^3b^2$

11.  $24a^2b^3$  and  $14a^5b$

12.  $24a^4b^3$  and  $18a^3b^5$

6.  $5b$

\*1.

7.  $2ab$

8.  $3ab$

\*2.

9.  $3ab^2$

10.  $6a^2b^2$

3.  $3x^2y$

11.  $2a^2b$

4.  $4x$

12.  $6a^3b^3$

5.  $4xy$