Greatest Common Factor (GCF)

**Vocabulary:**

Factor: In general, if \( a, b, \) and \( c \) are natural numbers and \( a \cdot b = c \), then \( a \) and \( b \) are **factors** of \( c \).

\[ 30 = \]

Factors are also divisors

Find the GCF of: \( 23, 33, 26, 8, 2 \)

When finding the GCF of numbers, we are looking for the __________ number that divides all the numbers without a remainder.

When finding the GCF of variables, we are looking for the __________ exponent.

Factor completely:

1. \( 18x - 45y \)

2. \( 24x^3y^2 + 32xy^4 \)

3. \( -28x^2y^3 + 14x^2y^4 - 7xy^2 \)

4. \( 12x^3y - 24x^2y^2 - 8xy^3 - 20x^3y^3 \)