

We exploit the **Multiplicative Identity Property of Real Numbers**. This rule states that for any real number c :

$$c \cdot 1 = c$$

By setting $x = 1$ and $y = 1$, every variable term evaluates to 1 regardless of its exponent because $1^n = 1$ and $1 \cdot 1 = 1$.

For the expression $(3x - 4y)^{12}$:

1. Replace x with 1.
2. Replace y with 1.
3. Evaluate the remaining arithmetic inside the parenthesis:

$$Sum = [(3)(1) - 4(1)]^{12}$$

Since any negative number raised to an even power yields a positive result, $(-1)^{12} = 1$.