

You applied the rational exponent only to the coefficient of the expression. However, correctly applying the rules of exponents would give you:

$$(256x^{16}y^2)^{\frac{1}{4}} = 256^{\frac{1}{4}} \cdot x^{\frac{16}{4}} \cdot y^{\frac{2}{4}}$$

In addition to calculating the coefficient, simplify the exponents of the variables.