

## Potenzen Aufgabe 31

$$\begin{aligned}
 & \frac{(6abx)^3 * (10aby)^4}{(4ab)^4 * (3ax)^3 * (25by)^2} = \frac{6^3 a^3 b^3 x^3 * 10^4 a^4 b^4 y^4}{4^4 a^4 b^4 * 3^3 a^3 x^3 * 25^2 b^2 y^2} = \\
 & \frac{2^3 * 3^3 * 2^4 * 5^4}{2^4 * 2^4 * 3^3 * 5^2 * 5^2} * \frac{a^{3+4} * b^{3+4} * x^3 * y^4}{a^{4+3} * b^{4+2} * x^3 * y^2} = \\
 & = \frac{1}{2} * \frac{a^7 * b^7 * x^3 * y^4}{a^7 * b^6 * x^3 * y^2} = \frac{1}{2} * b * y^2
 \end{aligned}$$