

Exponent Challenge

$$\frac{6x^4 \cdot 2xy \cdot 3y^5}{2x^3 \cdot 3y^3 \cdot x^2}$$

$$6y^3$$

$$\frac{64a^5b^2c}{16a^3b^5c}$$

$$\frac{4a^2}{b^3}$$

$$\left(\frac{36a^8b^3c}{9a^6b^3c^2}\right)^{-2}$$

$$\frac{c^2}{16a^4}$$

$$\frac{(-4x^4y^3z^3)^3}{(2x^2yz^3)^5}$$

$$\frac{-2x^2y^4}{z^6}$$

$$\frac{81x^{12}y^4z^8}{(3x^4y^3z^2)^3}$$

$$\frac{3z^2}{y^{13}}$$

$$\left(\frac{-3x^5y^3}{x^4y^2}\right)^3 \cdot \left(\frac{x^6y^2}{9x^4y}\right)^2$$

$$\frac{-x^7y^5}{3}$$

$$\left(\frac{36x^9y^8z^5}{3x^7y^3}\right)^2 \cdot \left(\frac{3x^5y^2}{x^6y^5z^2}\right)^{-3}$$

$$\frac{16x^7y^{19}z^{16}}{3}$$

$$\left(\frac{81x^{-5}y^6z^4}{27x^{-5}y^4z^3}\right)^3 \cdot \left(\frac{6x^{11}y^5z^4}{24x^8y^3z^4}\right)^{-2} \cdot (12y^4z)^{-2}$$

$$\frac{3z}{x^6y^6}$$