

Simplify (No negative exponent in your final answer)

1.  $(-2x^2y^{-3})^3$

2.  $\frac{5xy^{-3}}{3x^3y} \times \frac{12xy^4}{25x^{-2}y}$

3.  $(-2xy^2)(5x^3y^{-3}) \div (25x^5y)$

4.  $\left(\frac{6x^2y}{30xy^{-3}}\right)^{-2}$

5.  $\left(\frac{2x^2y}{14x^{-2}y^{-3}} \div \frac{8xy^2}{16x^{-3}y^3}\right)^3$

Answer:

1.  $\frac{-8x^6}{y^9}$

2.  $\frac{4x}{5y}$

3.  $\frac{-2}{5xy^2}$

4.  $\frac{25}{x^2y^8}$

5.  $\frac{8y^{15}}{343}$