

Simplify. NO negative exponents in answers!

1. $p^{-7} p^3$

2. $\frac{21y^9}{35y^3}$

3. $\frac{12m^8 y^6}{-9my^4}$

4. $\frac{14(x^{-3})^4}{(2x^2)^3}$

5. $\frac{5x^4}{(6x^7)^0}$

6. $\frac{-6n^9 t^3}{-18n^9 t^5}$

7. $\frac{-20(m^2 v)(-v)^3}{5(-v)^2 (-m^4)}$

8. $\frac{x^{7y+1}}{x^{7y-5}}$

9. $\frac{(3m)^{-4}}{2m^{-4}}$

$\frac{m^4}{(3m)^4 \cdot 2}$ $\frac{\cancel{m^4}}{81\cancel{m^4}(2)}$ $\frac{1}{162}$

10. $(x^7y^3)^{-3}$

$\frac{1}{(x^7y^3)^3}$

11. $\left(\frac{3}{8}\right)^{-2} (x^8y^{-3}z)$

12. $\frac{5m^3}{t^{-6}}$

13. $\frac{6^2x^4}{2^3x^{-3}}$

$\frac{2^3x^4 \cdot x^3}{6^2} = \frac{8x^7}{36}$
 $\frac{2x^7}{9}$

14. $\frac{(3x^{-2})(5xy^{-8})}{(x^{-3})^4y^{-2}}$

15. $\left(\frac{x}{r^{-2}}\right)^{-3}$

16. $\frac{(8c^2)^{-2}}{c^4}$