

Paper Practice 8.3

Division Properties of Exponents

Simplify each expression. Assume that no denominator equals zero.

1. $\frac{a^7 b^8}{ab^5}$

2. $\frac{c^4 d^5}{c^4 d^2}$

3. $\frac{20d^3 f^2 g^8}{5d^2 f g^3}$

4. $\frac{-18h^6}{2h^3}$

5. $\left(\frac{2j^2 k^5}{3m}\right)^3$

6. $\left(\frac{n^2 p}{5q^4}\right)^2$

7. $\left(\frac{4ru^2}{5t^4}\right)^3$

8. $\left(\frac{u^2 v^6}{2w^5}\right)^4$

9. $\frac{x^5 y^4}{xy^4}$

10. $\frac{15z^6}{3z^5}$

11. $\left(\frac{2a^7}{7b^3}\right)^2$

12. $\left(\frac{c^3}{d^4 b^2}\right)^5$

13. $\frac{15f^6 g}{45f^2 g}$

14. $\frac{h^5 j^2 k^3}{h^3 j^2 k}$

15. $\frac{24m^5 n^4}{-8m^2 n^3}$

16. $\frac{3p^9}{21p^6}$