

Multiplication Properties of Exponents • Practice**Simplify each expression.**

1. $(q^2)(2q^4)$

2. $(-2u^2)(6u^6)$

3. $(9w^2x^8)(w^6x^4)$

4. $(y^6z^9)(6y^4z^2)$

5. $(b^8c^6d^5)(7b^6c^2d)$

6. $(14fg^2h^2)(3f^4g^2h^2)$

Product Rule

7. $(j^5k^7)^4$

8. $(n^3p)^4$

9. $[(2^2)^2]^2$

10. $[(3^2)^2]^4$

Power of a Power Rule

11. $[(4r^2t)^3]^2$

12. $[(-2xy^2)^3]^2$

13. $(y^2z)(yz^2)$

14. $(\ell^2k^2)(\ell^3k)$

15. $(-5m^3)(3m^8)$

16. $(-2c^4d)(-4cd)$

17. $(3pr^2)^2$

18. $(2b^3c^4)^2$

19. $(2a^3)^4(a^3)^3$

20. $(c^3)^2(-3c^5)^2$

Power of a Power Rule & Challenge Problems