

7-2**Practice**

Form G

Multiplying Powers With the Same Base

Rewrite each expression using each base only once.

1. $4^5 \cdot 4^3$

2. $2^4 \cdot 2^6 \cdot 2^2$

3. $5^6 \cdot 5^{-2} \cdot 5^{-1}$

4. $10^{-4} \cdot 10^4 \cdot 10^2$

5. $7^9 \cdot 7^3 \cdot 7^{-10}$

6. $9^2 \cdot 9^{-8} \cdot 9^6$

Simplify each expression.

7. $z^8 z^5$

8. $-4k^{-3} \cdot 6k^4$

9. $(-5b^3)(-3b^6)$

10. $(13x^{-8})(3x^{10})$

11. $(-2h^5)(4h^{-3})$

12. $-8n \cdot 11n^9$

13. $mn^2 \cdot m^2n^{-4} \cdot mn^{-1}$

14. $(6a^3b^{-2})(-4ab^{-8})$

15. $(12mn)(-m^3n^{-2}p^5)(2m)$

Complete each equation.

16. $9^{-2} \cdot 9^4 = 9^{\square}$

17. $5^{\square} \cdot 5^3 = 5^2$

18. $2^8 \cdot 2^{\square} = 2^{-2}$