

7.1 Practice

Name: _____

Simplify each expression.

1. 13^0

2. 5^{-3}

3. $\frac{3}{3^{-4}}$

4. $\frac{2}{4^{-4}}$

5. $-(7)^{-2}$

6. 46^{-1}

7. -6^0

8. $-(12x)^{-2}$

9. $\frac{1}{8^0}$

10. $6bc^0$

11. $-(11x)^0$

12. $\left(\frac{2}{9}\right)^{-2}$

13. $3m^{-8}p^0$

14. $\frac{5a^{-4}}{2c}$

15. $\frac{-3k^{-3}(mn)^3}{p^{-8}}$

16. $\left(\frac{2m}{3n}\right)^{-3}$

17. $8^{-2}q^3r^{-5}$

18. $-(10a)^{-4}b^0$

19. $\frac{11xy^{-1}z^0}{v^{-3}}$

20. $\frac{5m^{-1}}{9(ab)^{-4}c^7}$

Evaluate each expression for $a = -4$, $b = 3$, and $c = 2$.

21. $3a^{-1}$

22. b^{-3}

23. $4a^2b^{-2}c^3$

24. $9a^0c^4$

25. $-a^{-2}$

26. $(-c)^{-2}$

7.2 Practice

Name: _____

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

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

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

Complete each equation.

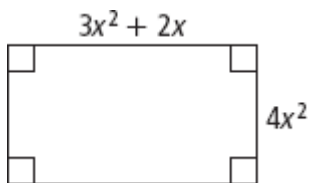
16. $9^{-2} \cdot 9^4 = 9^{\square}$

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

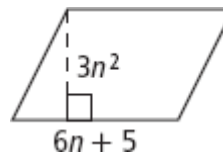
18. $2^8 \cdot 2^{\square} = 2^{-2}$

Find the area of each figure. Use your book to find any area formulas you don't know.

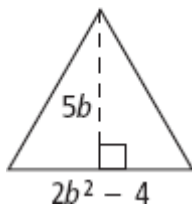
19.



20.



21.



22.

