

Practice and Problem-Solving Exercises

Simplify each expression.

9. 3^{-2}

10. $(-4.25)^0$

11. $(-5)^{-2}$

12. -5^{-2}

13. $(-4)^{-2}$

14. 2^{-6}

15. -3^0

16. -12^{-1}

17. $\frac{1}{2^0}$

18. 58^{-1}

19. 1.5^{-2}

20. $(-5)^{-3}$

Simplify each expression.

21. $4ab^0$

22. $\frac{1}{x^{-7}}$

23. $5x^{-4}$

24. $\frac{1}{c^{-1}}$

25. $\frac{3^{-2}}{n}$

26. $k^{-4}j^0$

27. $\frac{3x^{-2}}{y}$

28. $\frac{7ab^{-2}}{3w}$

29. $c^{-5}d^{-7}$

30. $c^{-5}d^7$

31. $\frac{8}{2s^{-3}}$

32. $\frac{7s}{5f^{-3}}$

33. $\frac{6a^{-1}c^{-3}}{d^0}$

34. $2^{-3}x^2z^{-7}$

35. $12^0t^7u^{-11}$

36. $\frac{7s^0f^{-5}}{2^{-1}m^2}$

Evaluate each expression for $r = -3$ and $s = 5$.

37. r^{-3}

38. s^{-3}

39. $\frac{3r}{s^{-2}}$

40. $\frac{s^0}{r^{-2}}$

41. $4s^{-1}$

42. r^0s^{-2}

43. $r^{-4}s^2$

44. $2^{-4}r^3s^{-2}$