

Section 8.2 Worksheet

Name: _____

Evaluate the expression.

1. 5^{-3}

2. 8^{-2}

3. $\frac{3^7}{3^4}$

4. $(-3)^{-4}$

5. $(-9)^{-1}$

6. $\frac{8^{16}}{8^3 \cdot 8^{10}}$

7. $(-5)^0$

8. $\left(\frac{1}{2}\right)^0$

9. $\left(\frac{1}{6}\right)^{-2}$

10. $\left(-\frac{1}{6}\right)^3$

11. $\left(\frac{2}{5}\right)^{-3}$

12. 0^{-2}

Simplify the expression. Write your answer using only positive exponents.

13. x^{-5}

14. m^{-9}

15. $\left(\frac{-1}{x}\right)^5$

16. $\frac{c^{-3}}{d^{-5}}$

17. $(3b)^{-4}$

18. $\left(\frac{x^7}{2y}\right)^5$

19. $\frac{x^{-6}}{4y^5}$

20. $2x^{-3}y^1$

21. $\frac{x^2}{y^{-4}}$

22. $(4x^{-4}y^2)^{-3}$

23. $(-3m)^{-4}$

24. $\frac{1}{3x^{-3}y^{-7}}$