

8.1 Worksheet
Algebra 1

Name _____

Simplify each expression.

1. 16^0

2. 3^{-3}

3. $\frac{1}{2^{-5}}$

4. $\frac{8^{-2}}{4^0}$

5. $\frac{32^{-1}}{8^{-1}}$

6. 8^{-4}

9. x^{-8}

10. $a^{-5}b$

11. m^2n^{-9}

12. $\frac{3m^{-4}}{n^{-8}}$

13. $\frac{a^{-2}b^{-1}}{cd^{-3}}$

14. $\frac{6m^{-8}n}{p^{-1}}$

Evaluate each expression for $a = -2$ and $b = 6$.

15. b^{-2}

16. a^{-3}

17. $(-a)^{-4}$

18. $(3a)^{-2}$

19. $2b^{-1}b^{-2}$

20. $3^{-2}a^{-2}b^{-1}$

Evaluate each expression for $m = 4$, $n = 5$, and $p = -2$.

21. m^p

22. p^{-m}

23. m^{-n}