Name _____ per. _____

Worksheet 1-5 Negative Exponents

Write each expression using a positive exponent.

1. $8^{-5} =$ **2.** $\frac{1}{(-4)^{-3}} =$ **3.** $z^{-2} =$ **4.** $\frac{1}{9^{-5}} =$

Evaluate each expression.

5. $(-6)^{-5} =$ **6.** $8^{-4} =$ **7.** $(-7)^{-3} =$ 8. $(-2)^{-2}(-7)^{0} =$

Simplify. Express using positive exponents.

9. $\frac{6^5}{6^7} =$ **10.** $n^{-2} \bullet n^{-3} =$ **11.** $\frac{k^{-4}}{k^{-6}} =$

12. ROADS A state highway that is 4^4 miles long runs parallel to a smaller country road that is 4^2 miles long. How many times longer than the country road is the state highway? Write the answer as a number with a positive exponent.

Bonus:

1. $\frac{x^{-2}}{y^{-3}} =$ 2. $\frac{a^{-2}b^2c^{-4}}{d^{-5}} =$