Kuta Software - Infinite Algebra 2

Name_____

Simplifying Rational Exponents

Date_____ Period____

Simplify.

1) $(n^4)^{\frac{3}{2}}$

2) $(27p^6)^{\frac{5}{3}}$

3) $(25b^6)^{\frac{2}{3}}$

4) $(64m^4)^{\frac{3}{2}}$

5) $(a^8)^{\frac{3}{2}}$

6) $(9r^4)^{\frac{1}{2}}$

7) $(81x^{12})^{\frac{5}{4}}$

8) $(216r^9)^{\frac{1}{3}}$

Simplify. Your answer should contain only positive exponents with no fractional exponents in the denominator.

9) $2m^2 \cdot 4m^{\frac{3}{2}} \cdot 4m^{-2}$

10) $3b^{\frac{1}{2}} \cdot b^{\frac{4}{3}}$

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

12) $\left(a^{\frac{1}{2}}\right)^{\frac{3}{2}}$

How did you feel while completing this homework?

1: I understood and could complete essentially no problems on this homework.	2: I could complete less than half of the problems on this homework.	3: I could complete most of the problems but got stuck on some of them as well.	4: I understood and could complete essentially all problems on this homework

If not at a four yet, what steps do you plan to take to further your understanding of this assignment? (See Mr. Scheuer before/after school, ask Mr. Scheuer for help during class, attend Intervention, get help from a tutor, get help from other resources, etc.)