Name_____

Class Period_____

Power to Power Homework

Directions: For #1-3, circle your choice.

1. Which choice shows $(2^2)^{-2}$ in exponential form?

a. 2^0 b. 2^4 c. 2^{-4} d. 1/16

2. Which choice shows $(11^6)^2$ in exponential form?

a. 22^6 b. 11^{12} c. 11^8 d. 11^4

3. Which choice shows $(3^2)^4$ in standard form?

a. 9   b. 18   c. 243   d. 6561

Directions: Simplify each expression.

4. $(ht)^8$ 4._____

5. $((a^2)^2)^2$ 5._____

6. $(3d^4f^2)^3$ 6._____

7. $(2s^7u^6)^4$ 7._____

8. $(k^5j^4)^3$ 8._____

Directions: Use $<, >, or =$ to complete each statement.

9. 2^5 ____ $(2^3)^2$

10. $(7^3)^3$ ____ 7^3*7^3

11. $(5^{-4})^2$ ____ 5^{-8}

12. $(6^{-2}6^5)^3$ ____ $(6^3)^2$