

Name _____

Period _____

Algebra 8: 7.3b Assignment**Directions:** Simplify each expression. Use calculations or an explanation to support each of your answers.

1. $(x^2)^5$

7. $(2^3)^{-3}$

13. $(m^7)^{-6}$

2. $(y^4)^8$

8. $(3^6)^0$

14. $(a^{10})^4$

3. $(p^3)^3$

9. $(x^2)^{-1}$

15. $(h^7)^{10}$

4. $(3^{-2})^2$

10. $(b^4)^6 \cdot b$

16. $(g^9)^{-8}$

5. $(a^{-3})^4 \cdot (a^7)^2$

11. $b \cdot (a^3)^4 \cdot (b^{-2})^3$

17. $(d^{-10})^{-7}$

6. $xy \cdot (x^2)^3 \cdot (y^3)^4$

12. $(x^4)^2 \cdot (x^{-1})^{-4}$

18. $(q^{-9})^5$