

Name: _____

Basic Skills

Date: _____

Product Properties of Exponents

Simplify, if possible. Write your answer as a power or a product of powers.

1. $4^2 \cdot 4^3$

2. $(9^2)^5$

3. $(-4a)^2$

4. $(5x)^4 \cdot (-4x)^2$

5. $[(3x - 2)^3]^3$

6. $(8ab)^2 \cdot 4a^9$

7. $(a^2bc^3)^4 \cdot (b^2c)^3$

8. $(-2x^2y)(x^3y^2)^3$

9. $(r^3s^7t^5)^3(s^2t)^5$

10. $(2)^3(2)^5$

11. $(\frac{1}{2}x)^3$

12. $(-2x^2y^3)^2$