

Name: _____

Period: _____ Date: _____

Using Exponent Rules

Section I. Simplify each expression. Leave all answers with positive exponents. Be careful, the problems in each row are similar, so look at each one carefully.

1. $k^7 \times k^2$

2. $4k^7 \times 5k^2$

3. $4k^7 m^2 \times 5k^2 m^4$

4. $\frac{y^8}{y^3}$

5. $\frac{15y^8}{27y^3}$

6. $\frac{15y^8(z^4)^4}{27(y^3)^3 z^{12}}$

7. $(3a)^3$

8. $(3a^5 b^3)^3$

9. $(3a^5 b^3)^3 \times (2a^4)^5$

10. $(7h^8)^2$

11. $\frac{(7h^8)^2}{7h^3}$

12. $\frac{7h^8 \cdot 0^2}{7h^3 \cdot 0}$

13. $2x^2 \times 3x^6$

14. $(2x^2)^4 \times (3x^6)^3$

15. $(2x^2 \times 3x^6)^2$