

Unit 9: Worksheet 1
 Multiplication Properties of Exponents I

Name _____

Period _____

In 1 – 4, identify the base and the exponent in each power.

- | | |
|--------------------------------------|---|
| 1. 7^2 Base: _____ Exponent: _____ | 2. $(-4)^3$ Base: _____ Exponent: _____ |
| 3. x^5 Base: _____ Exponent: _____ | 4. y^9 Base: _____ Exponent: _____ |

In 5 – 28, evaluate each expression.

5. 3^2	6. 2^4
7. $(-1)^3$	8. $(-5)^2$
9. $\left(\frac{1}{2}\right)^3$	10. $\left(-\frac{3}{4}\right)^2$
11. $2^3 \cdot 4^2$	12. $1^4(-1)^5$
13. $2^2 \cdot 2^5$	14. $(2 \cdot 3)^2$
15. $(-x)^2$	16. $(-x)^3$
17. $x^2 \cdot x^4$	18. $y^3 \cdot y$
19. $3a \cdot a^3$	20. $7b^2 \cdot 2b^5$
21. $t^3(t^2)(t^2)$	22. $b^5(-b)^2(-b)^3$
23. $(7b^4)(-3b)^2$	24. $(-2b)^3(-6b)^2$
25. $(xy^2)(x^3y)$	26. $(3a^2b^3)(-2ab^4)$
27. $(-2xy)^3$	28. $(3w^2)^2$