NC Math 1B **Unit 1 Exponent Review** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Expand.**

1. $(2a^{4})^{3}$ 2. $-3m^{4}$ 3. $\left(\frac{x}{y}\right)^{5}$

**Rewrite each expression using exponents.**

4. $6∙m∙ m ∙m∙n ∙p∙p $ 5. $5xy^{3} ∙ 5xy^{3}$ 6. 

**Simplify each expression.**

7.  8. $\left(-5x^{2}y\right)∙\left(3x^{4}\right)^{2}$ = 9. $m^{7}∙m^{-6}$ =

10.  + $k^{0} $= 11. $\left(\frac{1}{5}x^{3}\right)^{2}$ = 12. 

13.  14.  15. 

 16. $\left(6m^{ 2}n^{3}p^{ 4}\right)\left(7m^{5}n^{7}p^{6}\right)$ = 17.  18. $\left(-2ab^{2}c^{6}\right)^{-3}$ =

19. $\left(\frac{x^{12}}{z^{4}y^{16}w^{8}}\right)^{\frac{1}{4}}$ = 20.  21. $\left(\frac{15y^{6}x^{3}z^{-7}}{-3x^{-4}y^{6}z^{-11}}\right)^{2}$ =

22.  23.  24. 

25.  26. $\frac{36m^{6}}{28m^{10}}∙\frac{-7m^{3}}{3m^{-2}}$ = 27. $\frac{ab}{-8a^{4}cb^{7}} ∙ \frac{4a^{-3}c}{2b^{6}c^{-5}}$ =

**Find the missing value.** 28. $x^{???}∙x^{5}=x^{10}$ 29. $\frac{x^{7}}{x^{???}}=\frac{1}{x^{4}}$