**Lesson 1 Homework Practice**

***Powers and Exponents***

**Write each expression using exponents.**

 **1.** 3 • 3 • *m*  **2.**$\left(\frac{1}{4}\right)\left(\frac{1}{4}\right)\left(\frac{1}{4}\right)$

 **3.** 2 • *d* • 5 • *d* • *d* • 5 **4.** *p* • (–9) • *p* • (–9) • *p* • *q* • *q*

 **5.** *g* • (–7) • (–7) • *g* • *h* • (–7) • *h* **6.** *x* • $\frac{1}{8}$ • *x* • *x* • *y* • $\frac{1}{8}$ • *y* • *x*

**Evaluate each expression.**

 **7.** $(-8)^{4}$ **8.** $\left(\frac{1}{5}\right)^{3}$ **9.** $\left(-\frac{3}{5}\right)^{5}$

 **10.** $(-2)^{3}+5^{2}$ **11.** $3^{4}-5^{2}$ **12.** $(-2)^{5}-(-2)^{4}$

 **13.** $4^{3}÷2^{3}$ **14.** $5^{3}•2^{3}$ **15.** $1^{7}+(-3)^{4}$

**ALGEBRA Evaluate each expression.**

 **16.** $r^{3}-s$, if *r* = 5 and *s* = 4 **17.** $m^{2}-n^{3}$, if *m* = 6 and *n* = 2

 **18.** $f-g^{4}$, if *f* = 3 and *g* = –5 **19.** $(x^{5}-y^{2})^{2}+x^{3}$, if *x* = 2 and *y* = 8

 **20.** Replace with <, >, or = to make a true statement: $2^{4}$ $4^{2}$.

 **21. ISLANDS** Florida has about $2^{2}$ • $3^{2}$ • $5^{3}$islands (over 10 acres). About how many islands is this?