NAME _____ DATE _____ PERIOD _____

Lesson 2 Skills Practice

Powers and Exponents

Write each expression using exponents.

1. $2 \cdot 2 \cdot 2 \cdot 2$

2. $9 \cdot 9$

3. $7 \cdot 7 \cdot 5 \cdot 5 \cdot 5 \cdot 5$

4. $\frac{3}{8} \cdot \frac{3}{8} \cdot \frac{3}{8}$

5. $c \cdot \frac{1}{4} \cdot c \cdot \frac{1}{4} \cdot \frac{1}{4}$

6. $s \cdot 6 \cdot s \cdot s \cdot 6 \cdot 6 \cdot s$

7. $8 \cdot x \cdot 2 \cdot 2 \cdot 2 \cdot x \cdot 8$

8. $a \cdot (-4) \cdot b \cdot a \cdot b \cdot (-4) \cdot (-4)$

9. $\frac{1}{3} \cdot n \cdot 4 \cdot n \cdot \frac{1}{3} \cdot n \cdot 4 \cdot 4$

10. $9 \cdot 9 \cdot x \cdot w \cdot x \cdot y \cdot w \cdot 9 \cdot y$

Evaluate each expression.

11. 4^3

12. 2^5

13. $(-8)^3$

14. $\left(\frac{3}{5}\right)^4$

15. $2^8 - 3^2$

16. $2^3 \cdot 5^2$

17. $3^4 - (-4)^2$

18. $6 + 2^6$

19. $(-3)^3 \div 3^2$

ALGEBRA Evaluate each expression if $g = 2$ and $h = -3$.

20. g^4

21. $(g + h)^3$

22. $h^4 - h^3$

23. $g^3 + h^2$

24. $(g - h)^2 + h^2$

25. $h^4 - (h - g)^3$

NAME _____ DATE _____ PERIOD _____

Lesson 2 Homework Practice

Powers and Exponents

Write each expression using exponents.

1. $3 \cdot 3 \cdot m$

2. $\left(\frac{1}{4}\right)\left(\frac{1}{4}\right)\left(\frac{1}{4}\right)$

3. $2 \cdot d \cdot 5 \cdot d \cdot d \cdot 5$

4. $p \cdot (-9) \cdot p \cdot (-9) \cdot p \cdot q \cdot q$

5. $g \cdot (-7) \cdot (-7) \cdot g \cdot h \cdot (-7) \cdot h$

6. $x \cdot \frac{1}{8} \cdot x \cdot x \cdot y \cdot \frac{1}{8} \cdot y \cdot x$

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. $4^3 \div 2^3$

14. $5^3 \cdot 2^3$

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 $2^2 \cdot 3^2 \cdot 5^3$ islands (over 10 acres). About how many islands is this?