Name _____ Date _____ Class _____

LESSON 1-3

Practice A

Exponents

Name the base and the exponent for each of the following.

1. 7^2

base _____

exponent _____

2. 5^4

base _____

exponent _____

3. 6^8

base _____

exponent _____

4. 5^9

base _____

exponent _____

5. 10^7

base _____

exponent _____

6. 4^3

base _____

exponent _____

Write using exponents.

7. 4×4

_____

8. $2 \times 2 \times 2$

_____

9. 10×10

_____

10. $5 \times 5 \times 5 \times 5$

_____

11. $3 \times 3 \times 3 \times 3$

_____

12. $8 \times 8 \times 8 \times 8 \times 8$

_____

Write as repeated multiplication.

13. 6^2

_____

14. 5^3

_____

15. 10^3

_____

16. 9^4

_____

17. 2^5

_____

18. 3^6

_____

19. How many different ways can you use the digits 3 and 5 to write expressions in exponential form? What are the expressions?

_____

20. What do the following two expressions have in common? "three to the second power" and "three squared"

_____

Name _____ Date _____ Class _____

LESSON 1-3

Practice B

Exponents

Write each expression in exponential form.

1. 9×9 _____

2. $7 \times 7 \times 7$ _____

3. $1 \times 1 \times 1 \times 1 \times 1$ _____

4. $5 \times 5 \times 5 \times 5$ _____

5. $2 \times 2 \times 2 \times 2 \times 2 \times 2$ _____

6. $10 \times 10 \times 10 \times 10$ _____

Find each value.

7. 6^2 _____

8. 5^3 _____

9. 10^3 _____

10. 7^2 _____

11. 2^5 _____

12. 3^4 _____

13. 25^1 _____

14. 16^0 _____

Compare. Write <, >, or =.

15. $8^0 \square 7^1$

16. $10^2 \square 11^2$

17. $8^2 \square 4^3$

18. $3^4 \square 5^2$

19. $2^5 \square 9^2$

20. $6^2 \square 3^3$

21. What whole number equals 25 when it is squared and 125 when it is cubed?

_____

22. Use exponents to write the number 81 three different ways.

_____