Name_____ Date _____

1.2 Practice B

Write the product as a power.

1. 12×12

2. $4 \circ 4 \circ 4$

3. $5 \times 5 \times 5 \times 5$

4. $25 \times 25 \times 25$

5. $30 \times 30 \times 30 \times 30 \times 30$

6. $17 \circ 17 \circ 17$

Find the value of the power.

7. 13^2

8. 2^5

9. 8^3

Use a calculator to find the value of the power.

10. 5^6

11. 13^4

12. 3^8

13. Describe and correct the error in writing the value of the product.

$$\diagdown\!\!\!\!\diagup \quad 7^5 = 7 \times 5 = 35$$

14. The price of a car is 3×10^4. What is the price of the car?

Determine whether the number is a perfect square.

15. 169

16. 625

17. 336

Write the product as a power.

18. $d \circ d \circ d \circ d$

19. $5 \circ z \circ z \circ z$

20. $p \circ p \circ p \circ p \circ p \circ p$

21. The number 75 falls between what two perfect squares?

22. A homeowner would like to modify the existing patio to create a square patio, either by adding new tiles or moving existing tiles. Each tile is one foot square. The current patio is shown.

    a. What is the area of the existing patio in square feet?

    b. How could the homeowner rearrange the tiles to create a square patio without adding new tiles?

    c. How many tiles must the homeowner purchase to create a patio that is 49 square feet? Can this be done without moving any of the existing tiles?

    d. To create a patio that is 25 square feet, the homeowner must move some tiles and remove others. How many tiles must be moved and how many must be removed?

Name _____   Date _____

Did You Hear About The...

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

320 FOR	
4436 TEST	
181,632 BECAUSE	
40 TO	
4091 SPIDER	
15,275 CAR	
52 FAST	
4460 TO	
$44\frac{17}{164}$ IT	
6 WANTED	
18,622 WEB	

Find the value of the expression.

A. $3328 + 763$

B. $6462 + 2841$

C. $2857 + 2788$

D. $8583 - 4123$

E. $6054 - 1618$

F. $3527 - 2072$

G. 73×26

H. 235×65

I. 528×344

J. $24\overline{)864}$

K. $432 \div 72$

L. $8960 \div 224$

M. $\dfrac{5409}{50}$

N. $\dfrac{7233}{164}$

O. Piano lessons cost $20 per week. How much will it cost, in dollars, for 16 weeks of piano lessons?

P. The scores of the first two football games were 28 and 35. What was the total number of points scored in the first two football games?

Q. The school store has 14 boxes of notebooks with the school mascot on them. If there are 980 notebooks, how many notebooks are in each box?

5645 ASKED	
$108\frac{9}{50}$ TAKE	
63 A	
1455 DRIVE	
60 SIGN	
1898 A	
70 SPIN	
36 HE	
7 BUMPER	
9303 THAT	
11 LIMIT	

Name _____ Date _____

1.2 Puzzle Time

Did You Hear About...

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

15 HITS	
5^3 CREATED	
46 CATCHER	
27 HE	
No LOT	
7^3 SITE	
64 WANTED	
11^5 WEB	
36 GET	
3^5 PLAYER	
71 SURF	

Write the product as a power.

A. 8×8 B. 12×12

C. $3 \times 3 \times 3 \times 3 \times 3$ D. $9 \bullet 9 \bullet 9 \bullet 9$

E. $5 \bullet 5 \bullet 5$ F. $4 \bullet 4 \bullet 4 \bullet 4 \bullet 4 \bullet 4$

G. $11 \bullet 11 \bullet 11 \bullet 11 \bullet 11$ H. $7 \times 7 \times 7$

Find the value of the power.

I. 2^4 J. 3^3

K. 4^3 L. 10^4

M. 6^2 N. 5^2

Determine whether the number is a perfect square.

O. 12   P. 144

Q. You are arranging chairs in the auditorium for the talent show. The number of rows is to be the same as the number of chairs per row. You will need a total of 225 chairs. How many chairs will be in each row?

25 A
12^2 BASEBALL
10,000 TO
8^2 THE
56 INNING
9^4 WHO
72 HOMERUN
4^6 A
Yes OF
16 BECAUSE
17 STRIKE

1.2 Practice B

1. 12^2 2. 4^3 3. 5^4 4. 25^3

5. 30^5 6. 17^3 7. 169 8. 32

9. 512 10. 15,625 11. 28,561 12. 6561

13. $7^5 = 7 \times 7 \times 7 \times 7 \times 7 = 16,807$

14. $30,000 15. yes 16. yes

17. no 18. d^4 19. $5z^3$

20. p^6 21. 64 and 81

22. a. 36 ft^2

b. Divide a row of 4 tiles among the other 2 rows of 4 tiles, creating 6 rows of 6 tiles.

c. 13 tiles; yes d. Move 1 tile; remove 11 tiles.

1.2 Puzzle Time

THE BASEBALL PLAYER WHO CREATED A WEB
SITE BECAUSE HE WANTED TO GET A LOT OF
HITS

1.3 Practice A

1. 4 2. 4 3. 3

4. 3 5. 32 6. 39

7. 10 8. 7 9. 1

10. $56 \div 4 \times 2 = 14 \times 2 = 28$

11. 12 problems 12. 3

13. 44 14. 16 15. 21

16. 3 17. 52 18. 145 cents

19. *Sample answer:* $14 \div 7 + 5 - 2 \times 3$

20. $37; $3 \times 9 + 2 \times 4 + 4 \times 3 - 10$

21. $25.50; $17 \times 6 \div 4$