

Homework Practice

Powers and Exponents

Write each product using an exponent.

1. 20×20

2. $4 \times 4 \times 4 \times 4$

3. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

4. $3 \times 3 \times 3 \times 3 \times 3$

5. $10 \times 10 \times 10$

6. $7 \times 7 \times 7 \times 7 \times 7 \times 7$

7. $25 \times 25 \times 25$

8. $5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5$

9. 6.5×6.5

10. **SUN** The surface temperature of the sun is close to $10 \times 10 \times 10 \times 10$ degrees Fahrenheit. Write this product using an exponent.

11. **BONES** There are about $6 \times 6 \times 6$ bones in the adult human body. Write this product using an exponent.

Write each power as a product of the same factor. Then find the value.

12. 15^3

13. 6^5

14. 0^4

15. 7^4

16. 5^5

17. 1^8

18. 3.5^2

19. 2.5^3

20. **NEWSPAPERS** Tamika delivered 50^2 newspapers last summer. Write 50^2 as a product of the same factor. Then find the value.

21. **POPULATION** One of the world's smallest countries, Vatican City, has a population less than 10^3 people. About how many people live in this country?