

6.2 Puzzle Time

Why Did The Mother Skunk Take Her Baby To See The Doctor?

Write the letter of each answer in the box containing the exercise number.

Rewrite the expression in rational exponent form.

1. $\sqrt{8}$ 2. $\sqrt[6]{43}$
 3. $(\sqrt[3]{9})^5$ 4. $(\sqrt[7]{-51})^{11}$

Rewrite the expression in radical form.

5. $19^{1/4}$ 6. $802^{1/7}$
 7. $(-12)^{2/5}$ 8. $16^{3/2}$

Evaluate the expression.

9. $\sqrt[3]{125}$ 10. $\sqrt[5]{-32}$ 11. $243^{1/5}$
 12. $(512)^{1/3}$ 13. $64^{5/6}$ 14. $(256)^{3/4}$
 15. $(-128)^{5/7}$ 16. $(-125)^{4/3}$ 17. $(\frac{1}{64})^{5/6}$
 18. $(\frac{16}{625})^{3/4}$ 19. $(343)^{-2/3}$ 20. $\frac{1}{81^{1/4}}$
 21. The volume of a number cube is 3^6 cubic millimeters.
 Find the length of one side of the number cube.

Answers

O. 64 S. $(\sqrt{16})^3$
 E. $(-51)^{11/7}$ C. $\frac{1}{32}$
 W. 8 U. $9^{5/3}$
 I. $\frac{1}{49}$ O. 625
 U. $(\sqrt[5]{-12})^2$ B. -2
 A. $8^{1/2}$ F. 32
 O. $\frac{8}{125}$ T. $43^{1/6}$
 E. 5 S. -32
 R. $\frac{1}{3}$ D. 9
 T. $\sqrt[4]{19}$ A. $\sqrt[7]{802}$
 O. 3

10	4	17	6	3	15	9		19	5		12	1	8	
16	7	2		18	13		14	21	11	20				