

I. Vocabulary. Complete the following sentence.

The exponent $\frac{1}{n}$ in the expression $a^{\frac{1}{n}}$ is called a _____.

II. Write each radical as a power. (You are not evaluating... just rewriting.)

1. $\sqrt[4]{15}$
 $15^{\frac{1}{4}}$

2. $\sqrt[3]{5}$

3. $\sqrt[4]{31}$

4. $\sqrt[3]{x}$

5. $\sqrt[6]{y}$

6. \sqrt{z}

7. $\sqrt[5]{x^2}$

8. $\sqrt[7]{8^5}$

9. $\sqrt[3]{12^2}$

III. Write each power as a radical.

10. $12^{\frac{1}{3}}$
 $\sqrt[3]{12}$

11. $7^{\frac{1}{5}}$

12. $18^{\frac{1}{4}}$

13. $d^{\frac{1}{5}}$

14. $c^{\frac{1}{6}}$

15. $x^{\frac{1}{7}}$

16. $5^{\frac{2}{3}}$

17. $8^{\frac{2}{5}}$

18. $x^{\frac{3}{5}}$