

Examples:

$$27^{\frac{1}{3}} = \sqrt[3]{27} = 3$$

$$16^{\frac{1}{4}} = \sqrt[4]{16} = 2$$

$$1000^{\frac{2}{3}} = (1000^{\frac{1}{3}})^2 = (\sqrt[3]{1000})^2 = 10^2 = 100$$

$$16^{\frac{5}{2}} = (16^{\frac{1}{2}})^5 = (\sqrt{16})^5 = 4^5 = 1024$$

Find the value of:

1. $64^{\frac{1}{3}} = 4$

10. $81^{\frac{3}{2}} = 729$

2. $8^{\frac{1}{3}} = 2$

11. $216^{\frac{2}{3}} = 36$

3. $49^{\frac{1}{2}} = 7$

12. $243^{\frac{3}{5}} = 27$

4. $400^{\frac{1}{2}} = 20$

13. $128^{\frac{2}{7}} = 4$

5. $81^{\frac{1}{4}} = 3$

14. $144^{\frac{3}{2}} = 1728$

6. $81^{\frac{1}{2}} = 9$

15. $25^{\frac{3}{2}} = 125$

7. $49^{\frac{3}{2}} = 243$

16. $16^{\frac{7}{4}} = 128$

8. $100^{\frac{3}{2}} = 1000$

17. $100,000^{\frac{3}{5}} = 1000$

9. $8^{\frac{5}{3}} = 32$

18. $3125^{\frac{2}{5}} = 25$