

Simplify each expression.

1. $125^{\frac{1}{3}}$

2. $64^{\frac{1}{2}}$

3. $32^{\frac{1}{5}}$

4. $7^{\frac{1}{2}} \cdot 7^{\frac{1}{2}}$

5. $(-5)^{\frac{1}{3}} \cdot (-5)^{\frac{1}{3}} \cdot (-5)^{\frac{1}{3}}$

6. $3^{\frac{1}{2}} \cdot 75^{\frac{1}{2}}$

7. $12^{\frac{1}{2}} \cdot 27^{\frac{1}{2}}$

8. $12^{\frac{1}{3}} \cdot 45^{\frac{1}{3}} \cdot 50^{\frac{1}{3}}$

9. $18^{\frac{1}{2}} \cdot 98^{\frac{1}{2}}$

Write each expression in radical form.

10. $x^{\frac{4}{3}}$

11. $(2y)^{\frac{1}{3}}$

12. $a^{1.5}$

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

14. $z^{\frac{2}{3}}$

15. $(ab)^{\frac{1}{4}}$

16. $m^{2.4}$

17. $t^{-\frac{2}{7}}$

18. $a^{-1.6}$

Write each expression in exponential form.

19. $\sqrt[3]{2y^2}$

20. $(\sqrt[4]{b})^3$

21. $\sqrt{-6}$

22. $\sqrt{(6a)^4}$

23. $\sqrt[5]{n^4}$

24. $\sqrt[4]{(5ab)^3}$