

Answer Key

Practice C

1. 16
2. 2187
3. 1
4. $\frac{27}{8}$
5. $\frac{81}{4096}$
6. 243
7. $\frac{x^3}{2y^2}$
8. $-\frac{4}{3y^2}$
9. 1
10. $-\frac{5y}{4x^2}$
11. $12x$
12. $\frac{4x^2}{y^4}$
13. $16x^5$
14. $\frac{y^{10}z^2}{4x^2}$
15. $\frac{1}{x^{48}}$
16. 2
17. 6
18. 4
19. 3
20. -5
21. -3
22. $\frac{4}{3}\pi\left(\frac{7}{4}\right)^3 \text{ in.}^3 = \frac{343\pi}{48} \text{ in.}^3$
23. $\frac{190 \cdot \frac{4}{3}\pi\left(\frac{7}{4}\right)^3}{(20)^3} = \frac{6517\pi}{38,400}$
24. about 53.32%
25. 345,600 in.³