DIRECTIONS: Simplify. When variables are present, assume each radical represents a real number.

1. $\sqrt[3]{250}$

$5\sqrt[3]{2}$

2. $\sqrt[3]{135}$

$3\sqrt[3]{5}$

3. $\sqrt[3]{\frac{5}{4}}$ $\frac{\sqrt[3]{10}}{2}$

4. $\sqrt[3]{\frac{2}{9}}$ $\frac{\sqrt[3]{6}}{3}$

5. $\frac{9\sqrt{2}}{\sqrt{18}}$ 3

6. $\frac{4\sqrt{3}}{\sqrt{12}}$ 2

7. $(2\sqrt{7})^2$

28

8. $(3\sqrt{6})^2$

54

9. $(\sqrt[3]{45})(\sqrt[3]{12})$

$3\sqrt[3]{20}$

10. $(\sqrt[3]{20})(\sqrt[3]{14})$

$2\sqrt[3]{35}$

11. $\frac{\sqrt[3]{60}}{\sqrt[3]{36}}$ $\frac{\sqrt[3]{45}}{3}$

12. $\frac{\sqrt[3]{175}}{\sqrt[3]{50}}$ $\frac{\sqrt[3]{28}}{2}$

13. $\sqrt{32}$

$4\sqrt{2}$

14. $\sqrt[3]{32}$

$2\sqrt[3]{4}$

15. $\sqrt[4]{32}$

$2\sqrt[4]{2}$

16. $\sqrt[5]{32}$ 2

17. $\sqrt{\frac{3}{8}}$ $\frac{\sqrt{6}}{4}$

18. $\sqrt[3]{\frac{3}{8}}$ $\frac{\sqrt[3]{3}}{2}$

19. $\sqrt[4]{\frac{3}{8}}$ $\frac{\sqrt[4]{6}}{2}$

20. $\sqrt[5]{\frac{3}{8}}$ $\frac{\sqrt[5]{12}}{2}$

21. $\sqrt{18x^2}$ $3x\sqrt{2}$

22. $\sqrt{12x^5}$ $2x^2\sqrt{3x}$

23. $\sqrt[3]{375a^5}$ $5a\sqrt[3]{3a^2}$

24. $\sqrt[3]{16c^4}$ $2c\sqrt[3]{2c}$

25. $\sqrt{\frac{x^2}{y^3}}$ $\frac{x\sqrt{y}}{y^2}$

26. $\sqrt{\frac{y^2}{x^5}}$ $\frac{y\sqrt{x}}{x^3}$

27. $\sqrt[3]{\frac{27a}{4b^4}}$ $\frac{3\sqrt[3]{2ab^2}}{2b^2}$

28. $\sqrt[3]{\frac{8c}{9d^5}}$ $\frac{2\sqrt[3]{3cd}}{3d^2}$