

Algebra 1
Radicals Review Answer Key

Simplify.

1. $2\sqrt{6}$ 2. $10\sqrt{2}$ 3. $3\sqrt[3]{6}$ 4. $2\sqrt[3]{3}$ 5. $\frac{2\sqrt{3}}{3}$
 6. $\frac{2\sqrt[3]{2}}{3}$ 7. $\frac{5}{2}$ 8. $\frac{\sqrt[3]{4}}{5}$

Perform the indicated operation. Leave your answer in radical form.

9. $9\sqrt{6}$ 10. $\sqrt[3]{5}$ 11. -3 12. $-3\sqrt[3]{2}$
 13. $6\sqrt{7}$ 14. $300\sqrt{6}$ 15. $7\sqrt[3]{7}$ 16. $\frac{4}{3}$

Solve.

17. $x=19$ or $x=-19$ 18. $x=3$ or $x=-3$ 19. $x=2$ or $x=-1$ 20. *no solution*
 21. $x \geq 16$ or $x \leq -20$ 22. $x < 3$ or $x > \frac{-5}{3}$

With the equation $f(x) = 2|x| - 1$ and the graph of $g(x)$, find:

23. Domain: $(-\infty, \infty)$ 24. Domain: $(-\infty, 4]$
 Range: $[-1, \infty)$ Range: $[-1, \infty)$

25. 4 26. -2 27. -11

