

RIDDLE
 PRE AP ALGEBRA 2
 RADICAL TEST REVIEW

NAME _____

Simplify.

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|--|--|---------------------------------|
| 1. $-\sqrt[4]{256}$ | 2. $256^{\frac{1}{4}}$ | 3. $32^{\frac{3}{5}}$ |
| 4. $(\frac{36}{25})^{\frac{1}{2}}$ | 5. $m^{\frac{3}{4}}n^{\frac{5}{2}}p^{\frac{9}{8}}$ | 6. $\frac{1}{3y^{\frac{5}{3}}}$ |
| 7. $\frac{5}{x^{\frac{1}{2}}-2}$ | 8. $(d^{\frac{2}{5}})^{\frac{15}{8}}$ | 9. $\sqrt[6]{(m+4)^6}$ |
| 10. $\sqrt{676x^4y^6}$ | 11. $\sqrt[3]{-27x^9y^{12}}$ | 12. $\sqrt[3]{-432}$ |
| 13. $\sqrt[4]{\frac{8}{9a^3}}$ | 14. $\sqrt{\frac{11}{9}}$ | |
| 15. $\sqrt{3x^2y^3} \cdot \sqrt{75xy^5}$ | 16. $\sqrt[3]{9t^5v^8} \cdot \sqrt[3]{6tv^4}$ | |

Express using rational exponents.

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|--------------------|-------------------|----------------------|
| 17. $\sqrt[3]{26}$ | 18. $\sqrt[7]{4}$ | 19. $\sqrt[10]{x^6}$ |
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Solve each equation. You must check your work.

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|---------------------------|--------------------------|
| 20. $\sqrt{5y+4}=8$ | 21. $\sqrt[4]{a+5}-1=0$ |
| 22. $7 + \sqrt{3x+2} = 4$ | 23. $\sqrt{x-2} + 2 = x$ |

Graph:

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|----------------------------|------------------------------|
| 1. $f(x) = \sqrt{x}$ | 2. $f(x) = -\sqrt{x}$ |
| 3. $f(x) = \sqrt{x} - 1$ | 4. $f(x) = \sqrt{x-1}$ |
| 5. $f(x) = \sqrt{x}/2$ | 6. $f(x) = 2\sqrt{x}$ |
| 7. $f(x) = \sqrt{x+2} - 3$ | 8. $f(x) = \sqrt[3]{x}$ |
| 9. $f(x) = \sqrt[3]{-x}$ | 10. $f(x) = \sqrt[3]{x} + 2$ |
| 11. $f(x) = \sqrt[3]{x+2}$ | 12. $f(x) = -\sqrt[3]{x}$ |
| 13. $f(x) = 3\sqrt[3]{x}$ | |