

RIDDLE
PRE AP ALGEBRA 2
RADICAL TEST REVIEW

NAME _____

Simplify.

- $-\sqrt[4]{256} = \boxed{-4}$
- $256^{\frac{1}{4}} = \boxed{4}$
- $32^{\frac{3}{5}} = \boxed{\frac{1}{8}}$
- $(\frac{36}{25})^{\frac{1}{2}} = \boxed{\frac{6}{5}}$
- $m^{\frac{3}{8}}n^{\frac{5}{8}}p^{\frac{9}{8}} = \boxed{\frac{m^3n^5p^9}{\sqrt[8]{m^3n^5p^9}}}$
- $\frac{1}{3}y^{\frac{5}{3}} = \boxed{\frac{\sqrt[5]{y^5}}{y}}$
- $\frac{5}{\frac{1}{x^2}-2} = \boxed{\frac{5(\sqrt{x}+2)}{x-4}}$
- $(d^{\frac{2}{5}})^{\frac{15}{8}} = \boxed{d^{\frac{3}{4}}}$
- $\sqrt[5]{(m+4)^6} = \boxed{(m+4)}$
- $\sqrt{676x^4y^6} = \boxed{26x^2y^3}$
- $\sqrt[3]{-27x^9y^{12}} = \boxed{-3x^3y^4}$
- $\sqrt[3]{-432} = \boxed{-6\sqrt[3]{2}}$
- $\sqrt[4]{\frac{8}{9a^3}} = \boxed{\frac{\sqrt[4]{72a}}{3a}}$
- $\sqrt{\frac{11}{9}} = \boxed{\frac{\sqrt{11}}{3}}$
- $\sqrt{3x^2y^3} \cdot \sqrt{75xy^5} = \boxed{15xy^4\sqrt{x}}$
- $\sqrt[3]{9t^5v^8} \cdot \sqrt[3]{6tv^4} = \boxed{3t^2v^4\sqrt[3]{2}}$

Express using rational exponents.

- $\sqrt[3]{26} = \boxed{26^{\frac{1}{3}}}$
- $\sqrt[7]{4} = \boxed{4^{\frac{1}{7}}}$
- $\sqrt[10]{x^6} = x^{\frac{6}{10}} = \boxed{x^{\frac{3}{5}}}$

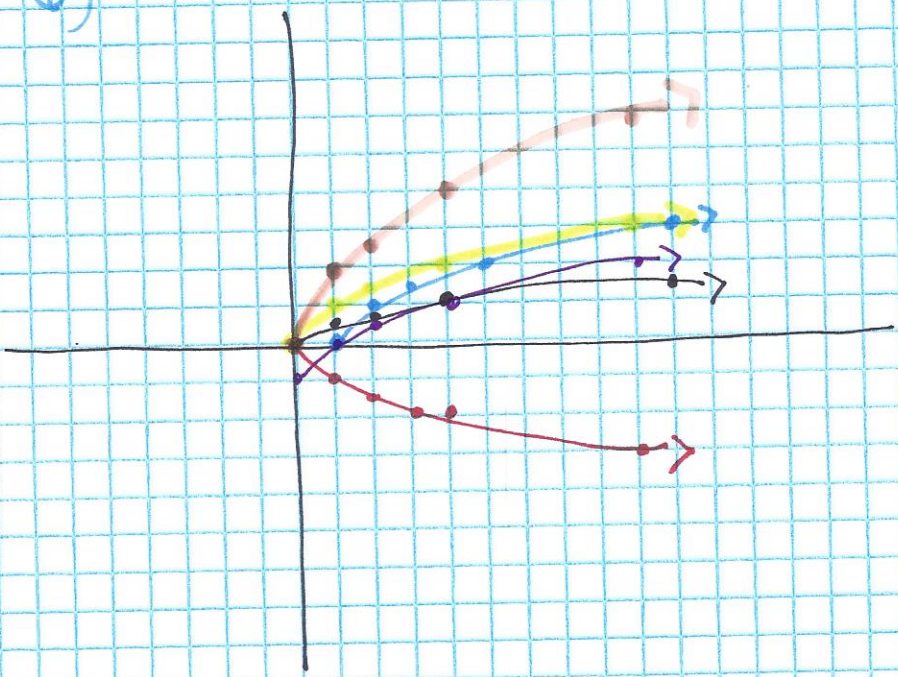
Solve each equation. You must check your work.

- $\sqrt{5y+4}=8 \quad \boxed{y=12}$
- $7 + \sqrt{3x+2} = 4 \quad \boxed{\emptyset}$
- $\sqrt[4]{a+5}-1=0 \quad \boxed{a=-4}$
- $\sqrt{x-2}+2=x \quad \boxed{x=2 \quad x=3}$

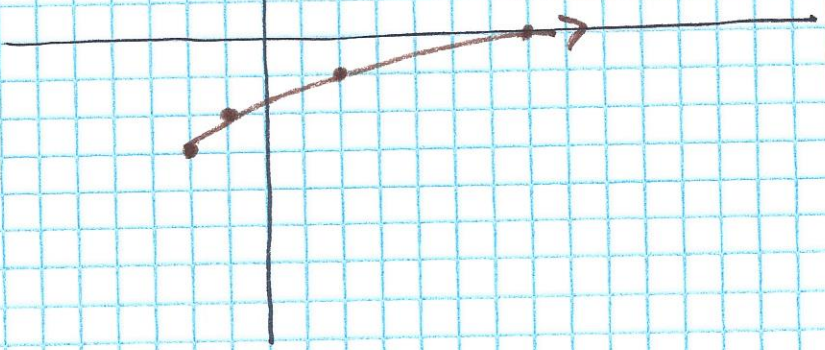
Graph:

- $f(x) = \sqrt{x}$
- $f(x) = -\sqrt{x}$
- $f(x) = \sqrt{x} - 1$
- $f(x) = \sqrt{x-1}$
- $f(x) = \sqrt{x}/2$
- $f(x) = 2\sqrt{x}$
- $f(x) = \sqrt{x+2} - 3$
- $f(x) = \sqrt[3]{x}$
- $f(x) = \sqrt[3]{-x}$
- $f(x) = \sqrt[3]{x+2}$
- $f(x) = \sqrt[3]{x} + 2$
- $f(x) = 3\sqrt[3]{x}$
- $f(x) = -\sqrt[3]{x}$

(1-6)



(7)



(8-13)

