

Name: _____

Rational and Radical Expressions

Evaluate in radical form

1 $27^{\frac{1}{3}}$

2 $8^{\frac{1}{3}}$

3 $(\frac{1}{4})^{-\frac{1}{2}}$

4 $32^{-\frac{3}{5}}$

5 $x^{\frac{2}{3}}$

6 8^{-2}

7 $x^{\frac{5}{1}}$

8 $4^{\frac{3}{2}}$

9 $(-8)^{\frac{1}{3}}$

10 $(9n^4)^{\frac{1}{2}}$

11 $(v^{12})^{\frac{1}{4}}$

12 $(a^8)^{\frac{1}{4}}$

Evaluate with a rational exponent

13 $\sqrt[3]{125a^6}$

14 $\sqrt{24x^8y^9}$

15 $(\sqrt[4]{6})^5$

16 $(\sqrt[3]{3x})^4$

17 $\sqrt[5]{v}$

18 $(\sqrt[4]{p})^3$

19 $\sqrt[6]{2}$

20 $(\sqrt[4]{5})^5$

21 $(\sqrt[3]{6x})^4$