

Functions & Trig.
Rational Exponents HW

Name _____

Rewrite the expression using rational exponent notation.

1.) $\sqrt{x^9}$

2.) $(\sqrt[3]{z})^8$

3.) $x\sqrt[7]{y^2}$

4.) $\sqrt[3]{x^5y^5}$

Rewrite the expression using radical notation.

5.) $x^{\frac{1}{6}}$

6.) $y^{\frac{4}{d}}$

7.) $(xz)^{\frac{3}{2}}$

8.) $xy^{\frac{3}{4}}$

Evaluate the expression without using a calculator.

9.) $8^{\frac{5}{3}}$

10.) $243^{\frac{3}{5}}$

11.) $81^{\frac{1}{4}}$

12.) $25^{\frac{3}{2}}$

13.) $32^{\frac{2}{5}}$

14.) $81^{\frac{1}{2}}$