

MTH 28 LECTURE NOTES (Ojakian)

Topic 15: Rational Exponents

OUTLINE

References: 8.3

1. Simplifying Expressions with Rational Exponents

- (a) First just $1/b$ exponent
- (b) Then a/b exponent

2. Conversions

- (a) Rational exponents to radical expression
- (b) Radical expression to rational exponent

3. Extra Problems

PROBLEM 1. *Simplify the following:*

(a) $\left(-\frac{27}{8}\right)^{\frac{1}{3}}$

(b) $\left(\frac{16}{9}\right)^{-\frac{3}{2}}$

(c) $\left(\frac{a^{\frac{3}{2}}b^{-\frac{2}{3}}}{c^{-\frac{1}{3}}}\right)^{\frac{2}{5}}$