

Math 121**Quiz 1**

No calculators permitted on this quiz. Justify all answers with neat and organized work. Clearly indicate your answers. 10 points possible.

1. (2 pts.) Is 0 a rational number?

2. (8 pts.) Simplify each expression. Do not leave negative exponents or fractional exponents in your answers.

(a) $\frac{5}{8} - \frac{5}{12}$

(b) $(4a^{-2}b^3)^{-3}$

(c) $5^{4/3} \cdot 5^{8/3}$

(d) $\frac{(2x^2)^{3/2}}{2^{1/2}x^4}$