

MTH 28.5 LECTURE NOTES (Ojakian)

Topic 23: Intro to Rational Expressions

OUTLINE

References: 7.1

1. Rational Expressions - Intro

What they are? And Simplifying

PROBLEM 1.

(a) *Section 7.1: 5, 8*

(b) $\frac{12(x+1)(x)(7x-2)}{10(7x+2)(x+1)(x)}$

(c) *Section 7.1: 9, 11*

2. Multiplying and Dividing Rational Expressions

PROBLEM 2.

(a) $\frac{10x^3y^2}{3z^2w} \cdot \frac{12z^8w^9}{15xy}$

(b) $\frac{10x(x-3)(x-2)}{3(2x+1)(x+3)} \cdot \frac{12(x+3)}{15x(x-2)}$

(c) $\frac{10x^3y^2}{3z^2w} \div \frac{15xy}{12z^8w^9}$

(d) $\frac{x^2 - 3x - 18}{10x^3 - 50x^2 + 60x} \div \frac{12x + 36}{15x^2 - 30x}$

3. Where Rational Expressions Are Undefined

Section 7.1: 1, 3