

**MTH 28 LECTURE NOTES (Ojakian)**  
**Topic 10: Intro to Rational Expressions**

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**OUTLINE**

References: 7.1

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**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