Today's Objectives

Perform mathematical operations with rational expressions to solve real-world problems and write answers in complete sentences that describe the real-world meaning using sentence stems.

Success Criteria:

- Write factored forms of rational expressions
- Subtract rational expressions using least common denominators
- Use polynomial factoring to simplify multiplied and divided rational expressions.

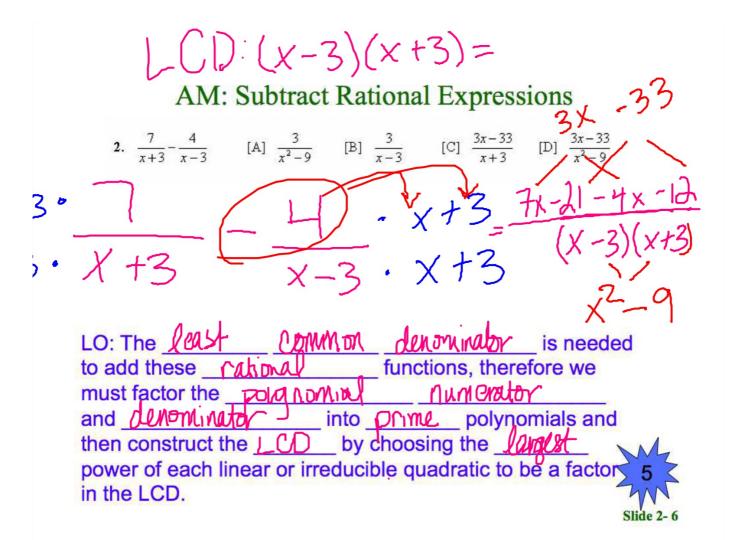
Vocabulary: numerator, denominator, extraneous solution, least common denominator (LCD), greatest common factor (GCF), prime number, prime polynomial, irreducible quadratic, linear

LCD: (X+1)(X+8) AM: Subtract Rational Expressions

Subtract:

1.
$$\frac{3}{(x^{2}+9x+8)} - \frac{9}{x+1}$$

[A] $\frac{-9x-75}{x^{2}+9x+8}$ [B] $\frac{-9x+5}{x^{2}+9x+8}$ [C] $-\frac{12}{x^{2}+8x+7}$ [D] $\frac{-9x+69}{x^{2}+9x+8}$
 $\frac{3}{(x^{2}+9x+8)} - \frac{12}{x^{2}+9x+8}$ [D] $\frac{-9x+69}{x^{2}+9x+8}$



1_CD:(X+4)(x-3)(x+3)

AM: Subtract Rational Expressions

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3.
$$\frac{x+3}{x^2+x-12}$$
 $\frac{(x+3)(x+3)}{(x+3)(x+4)}$ $\frac{(x+4)}{(x+4)(x+3)(x-3)}$ $\frac{(x+3)(x-3)}{(x+4)(x+3)(x-3)}$

[C] $\frac{-2x-7}{(x-4)(x+3)(x-3)}$ [D] $\frac{-2x-7}{(x+4)(x+3)(x-3)}$

$$\frac{(x+4)(x+3)}{(x+4)(x+3)}$$
 $\frac{(x+4)(x+3)(x+4)}{(x+4)(x+3)}$ $\frac{(x+4)(x+3)(x+4)}{(x+3)(x+4)}$ $\frac{(x+4)(x+3)(x+4)}{(x+3)(x+4)}$

