

Name: _____ is Amazing! 😊
Date: _____

Math 115 Spring 2026
Mr. Sahney

Standard 11 Practice

1. Find the least common denominator (LCD) of the following expressions. Write the LCD in factored form.

$$\frac{1}{(x-6)(x+5)} \text{ and } \frac{1}{(x+5)(x+6)}$$

2. Find the least common denominator (LCD) of the following expressions. Write the LCD in factored form.

$$\frac{3}{y^2 + 7y + 6} \text{ and } \frac{8y}{y^2 - 1}$$

3. Add and simplify the following rational expressions:

a) $\frac{a-4}{a^2-2a-8} + \frac{a+8}{a^2-2a-8}$

b) $\frac{1}{x+3} + \frac{1}{x-4}$

c) $\frac{6x}{x^2-49} + \frac{x}{x-7}$

d) $\frac{5y+7}{y-6} + \frac{2y}{6-y}$

4. Subtract and simplify the following rational expressions:

a) $\frac{3n+15}{n^2+7n+6} - \frac{n+3}{n^2+7n+6}$

b) $\frac{1}{x^2+4x+3} - \frac{1}{x^2-4x-5}$

$$\text{c) } \frac{x^2 + 25x}{x^2 + 14x + 40} - \frac{25}{x + 10}$$

$$\text{d) } \frac{2x - 6}{x - 1} - \frac{4}{1 - x}$$