

Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Addition and Subtraction of Rational Algebraic Expressions

A. Choose the letter of the correct answer.

1. $\frac{5a}{9} - \frac{2a}{9}$

a. $\frac{a}{9}$

b. $\frac{a}{6}$

c. $\frac{a}{3}$

d. $\frac{a}{2}$

2. $\frac{36}{x+6} + \frac{6x}{x+6}$

a. $\frac{6}{x+6}$

b. $\frac{s}{x+6}$

c. 1

d. 6

3. $\frac{7}{y-6} - \frac{1}{y}$

a. $\frac{6}{y(y-6)}$

b. $\frac{6y}{(y-6)}$

c. $\frac{y-1}{y(y-6)}$

d. $\frac{6(y+1)}{y(y-6)}$

4. $\frac{7b}{4} - \frac{3b}{4}$

a. b

b. $\frac{b}{2}$

c. $\frac{b}{3}$

d. $\frac{b}{4}$

5. $\frac{3x}{8} + \frac{5x+8}{8}$

a. $x + 1$

b. $\frac{x}{2}$

c. $\frac{x}{4}$

d. $\frac{x}{8}$

B. Solve the following rational algebraic expressions.

Add the following:

1. $\frac{3x}{8} + \frac{4}{5y}$

2. $\frac{9a-4}{8a+8} + \frac{3a+8}{9a+9}$

Subtract the following:

3. $\frac{a}{a+4} - \frac{a}{a+4}$

4. $\frac{4x^2}{2x-7} - \frac{49}{2x-7}$

5. $\frac{b^2+8b-6}{4b^2-8b} - \frac{5b+4}{4b^2-8b}$