

Solving Rational Expressions Practice

Perform the indicated operations

1. $\frac{3}{4a} - \frac{5}{18a} =$

4. $\frac{1}{9x^2 - 3xy} \div \frac{1}{y^2 - 3xy} =$

2. $\frac{3x - 15}{10} \div \frac{2x - 10}{10} =$

5. $\frac{x^2 - 3x + 2}{2x^2 - 5x + 2} \cdot \frac{x^2 - 2x - 8}{x^2 + x - 2} =$

3. $\frac{15}{2 - 4x} \cdot \frac{6x - 3}{10} =$

6. $\frac{5}{6b - 3a} - \frac{3}{2a - 4b} =$

Simplify

7. $\frac{1 - \frac{b^2}{a^2}}{1 - \frac{b}{a}} =$

Solve each expression

8. $\frac{4}{3x} - \frac{3}{4x} = \frac{7}{16}$

9. $\frac{1}{y+5} + \frac{2}{y-1} = 0$

Solve this problem

10. On the north branch of the Mouse River, Jimmie Miller can paddle his canoe 1 mile upstream in the same amount of time as it takes him to paddle 2 miles downstream. If he can paddle 3 miles per hour in still water, what is the rate of the current in the stream?

Answers

1. $\frac{17}{36a}$

2. $\frac{3}{2}$ or $1\frac{1}{2}$

3. $-\frac{9}{4}$ or $2\frac{1}{4}$

4. $-\frac{y}{3x}$

5. $\frac{x-4}{2x+1}$

6. $\frac{19}{-3(a-2b)}$

7. $\frac{a+b}{a}$ or $1 + \frac{b}{a}$

8. $x = \frac{4}{3}$

9. $y = -3$

10. speed of the current = 1 mph