Rational Equations 1

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Solve the equation.

1) $\frac{13}{14}x + \frac{8}{7} = \frac{6}{7}x$

1) _____

2) $\frac{2x}{5} - \frac{x}{3} = 4$

2) _____

Solve.

3) $\frac{4}{x - 4} + \frac{1}{4x - 16} = \frac{17}{4}$

3) _____

Solve and check.

4) $\frac{x}{2} - \frac{2}{x} = 0$

4) _____

5) $\frac{13}{5x} + \frac{1}{2x} = -\frac{1}{10}$

5) _____

6) $\frac{6}{5} - \frac{9}{10} = \frac{1}{x}$

6) _____

7) $\frac{x - 4}{2} - 1 = \frac{x + 4}{4}$

7) _____

8) $\frac{x - 2}{x - 6} = \frac{8}{6 - x}$

8) _____

Solve.

9) $\frac{y + 1}{y + 6} - \frac{y}{y^2 - 36} = \frac{y - 3}{y - 6}$

9) _____

10) $\frac{y}{y + 4} + \frac{8y + 28}{y^2 + 7y + 12} = \frac{4}{y + 3}$

10) _____

11) $\frac{7}{x - 6} + \frac{8}{x} = \frac{-48}{x^2 - 6x}$

11) _____

Solve the equation.

12) $\frac{2}{y + 3} - \frac{4}{y - 3} = \frac{12}{y^2 - 9}$

12) _____

13) $\frac{2}{t} = \frac{t}{5t - 12}$

13) _____

1

1) -16
2) 60
3) 5
4) -2, 2
5) -31
6) $\dfrac{10}{3}$

7) 16
8) -6
9) $\dfrac{4}{3}$

10) No solution
11) No solution
12) -15
13) 4, 6