Rational Equations 3

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

Solve the equation.

1) $\dfrac{17}{10}x + \dfrac{8}{5} = \dfrac{8}{5}x$

1) _____

2) $\dfrac{2x}{5} - \dfrac{x}{3} = 2$

2) _____

Solve.

3) $\dfrac{4}{x-1} + \dfrac{4}{2x-2} = 6$

3) _____

4) $\dfrac{x}{8} - \dfrac{8}{x} = 0$

4) _____

5) $\dfrac{14}{5x} + \dfrac{1}{2x} = -\dfrac{1}{10}$

5) _____

6) $\dfrac{8}{7} - \dfrac{13}{14} = \dfrac{1}{x}$

6) _____

7) $\dfrac{x+1}{7} - 1 = \dfrac{x-1}{5}$

7) _____

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

8) _____

9) $\dfrac{x-5}{x-6} = \dfrac{2}{6-x}$

9) _____

10) $\dfrac{y+1}{y+6} - \dfrac{y}{y^2-36} = \dfrac{y-3}{y-6}$

10) _____

11) $\dfrac{5}{y+4} - \dfrac{3}{y-4} = \dfrac{12}{y^2-16}$

11) _____

12) $\dfrac{8}{x-6} + \dfrac{7}{x} = \dfrac{-42}{x^2-6x}$

12) _____

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

13) _____

1

1) -16
2) 30
3) 2
4) -8, 8
5) -33
6) $\dfrac{14}{3}$

7) $-\dfrac{23}{2}$

8) No solution
9) 3
10) $\dfrac{4}{3}$

11) 22
12) No solution
13) 4, 6