Lesson 9-5 Solve each equation. Check your solutions.

1.
$$\frac{5}{x} + \frac{3}{5} = \frac{2}{x}$$

4.
$$\frac{1}{x} + \frac{x}{x+2} = 1$$

7.
$$\frac{1}{x-3} + \frac{1}{x+5} = \frac{x+1}{x-3}$$

10.
$$\frac{3x}{x^2+2x-8} = \frac{1}{x-2} + \frac{x}{x+4}$$

13.
$$\frac{1}{x^2-1}=\frac{2}{x^2+x-2}$$

$$2. \ \frac{1}{2+3x} + \frac{2}{2-3x} = 0$$

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

8.
$$\frac{4}{x^2-2x-3} = \frac{-x}{3-x} - \frac{1}{x+1}$$

11.
$$\frac{5x+2}{x^2-4} = \frac{-5x}{2-x} + \frac{2}{x+2}$$

$$14. \ \frac{12}{x^2 - 16} - \frac{24}{x - 4} = 3$$

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

6.
$$\frac{2}{x} + \frac{1}{x-2} = 1$$

$$9. \ \frac{x}{x+1} + \frac{3}{x-3} + 1 = 0$$

12.
$$\frac{1}{x-3} + \frac{2}{x^2-9} = \frac{5}{x+3}$$

15.
$$\frac{4}{x-2} - \frac{x+6}{x+1} = 1$$

Algebra II

Name:

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