Lesson 8.6 Worksheet

Name: _____

Solve the equation by cross multiplying. Check for extraneous solutions.

1.) $\dfrac{4}{2x} = \dfrac{5}{x+6}$

2.) $\dfrac{6}{x-1} = \dfrac{9}{x+1}$

3.) $\dfrac{x}{x+1} = \dfrac{3}{x+1}$

4.) $\dfrac{x}{x^2 - 2} = \dfrac{-1}{x}$

5.) $\dfrac{4(x-4)}{x^2 + 2x - 8} = \dfrac{4}{x+4}$

6.) $\dfrac{9}{x^2 - 6x + 9} = \dfrac{3x}{x^2 - 3x}$

Solve the equation by using the LCD. Check for extraneous solutions.

7.) $\dfrac{4}{x} + x = 5$

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

9.) $1 + \dfrac{6}{x} = \dfrac{2x-4}{x} - 3$

10.) $\dfrac{1}{x-2} + 2 = \dfrac{3x}{x+2}$

11.) $\dfrac{6}{x-3} - 4 = \dfrac{2}{x-3}$

12.) $\dfrac{x+1}{x+6} + \dfrac{1}{x} = \dfrac{2x+1}{x+6}$

13.) $\dfrac{10}{x} + 3 = \dfrac{x+9}{x-4}$

REVIEW

Add and simplify.

14.) $\dfrac{2x}{x^2+4x+4} + \dfrac{x-1}{x(x+2)}$

Divide and simplify.

15.) $\dfrac{x^2-6x-27}{2x^2+2x} \div \dfrac{x^2-14x+45}{x^2}$