Alg 1 Week 14 Mon block Warm Up

1. Solve a quadratic equation by factoring.

a. $2x^2 + x = 10$ b. $2b^2 + 5b = 3$

2. Skill 19: Multiply and Divide Rational Expressions.
Simplify the polynomial completely.

a. $\dfrac{y-3}{y^2-10y+16} \div \dfrac{y^2-9}{y-8}$

b. $\dfrac{t^2+5t+6}{t-3} \bullet \dfrac{t^2-2t-3}{t^2+3t+2}$

3. Simplify or solve and check as indicated.

a. $2 = \sqrt{-5w-2}$ b. $2\sqrt{8} + \sqrt{200}$ c. $(3\sqrt{6}+2\sqrt{2})(\sqrt{2}-4\sqrt{6})$

d. $\dfrac{\sqrt{72}}{\sqrt{50}}$

Notes 11-5 Solving Rational Equations

Problem 4 Solving a Rational Proportion

What is the solution of $\frac{4}{x+2} = \frac{3}{x+1}$?

Got It? **4.** Find the solution(s) of each equation. Check your solutions.

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

b. $\frac{c}{3} = \frac{7}{c-4}$

The process of solving a rational equation may give a solution that is extraneous because it makes a denominator in the original equation equal 0. An extraneous solution is a solution of an equation that is derived from the original equation, but is not a solution of the original equation itself. So you must check your solutions.

Problem 5 Checking to Find an Extraneous Solution

What is the solution of $\frac{6}{x+5} = \frac{x+3}{x+5}$?

Got It? **5.** What is the solution of $\frac{x-4}{x^2-4} = \frac{-2}{x-2}$? Check your solution.

HW p 735: 7, 11,14-17 and 11.2 Multiplying and Dividing Rational Expressions #2,4,5, & 8

Solve each equation. Check your solutions.

page 695: #17,25,27,29

17. $\frac{1}{t-2} = \frac{t}{8}$

Solve each equation. Check your solutions. If there is no solution, write *no solution*.

See Proble

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

27. $\frac{3}{m-1} = \frac{2m}{m+4}$

29. $\frac{30}{x+3} = \frac{30}{x-3}$

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CW/HW

11.2 Multiplying and Dividing Rational Expressions

Do #2,4,5, & 8

Multiply and or divide and simplify.

[redacted]

2. $\frac{x-9}{x+7} \cdot \frac{x}{x-6}$

[redacted]

4. $\frac{j^2+11j-42}{26j-52} \cdot \frac{39j}{j-3}$

5. $\frac{15r}{18r^2+9r-27} \cdot \frac{3r-3}{r^2}$

[redacted]

[redacted]

8. $\frac{5y+7}{3y+19} \div \frac{5y+7}{y-6}$