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

b.
$$\frac{t^2 + 5t + 6}{t - 3} \cdot \frac{t^2 - 2t - 3}{t^2 + 3t + 2}$$

- 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. $\frac{\sqrt{72}}{\sqrt{50}}$

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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 $\frac{6}{x+5} = \frac{x+3}{x+5}$?

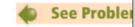
Got lt? 5. What is the solution of $\frac{x-4}{x^2-4} = \frac{-2}{x-2}$? Check your solution.

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.

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

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



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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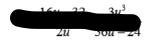
Alg I wk 14 Mon CW/HW 11.2 Multiplying and Dividing Rational Expressions

Do #2,4,5, & 8

Multiply and or divide and simplify.

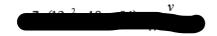


2.
$$\frac{x-9}{x+7} \cdot \frac{x}{x-6}$$



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





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