Alg 1 Friday Week 13 Warm Up

Simplify each expression.

1. $\dfrac{x^3-3x^2}{2x^3-4x^2-6x}$

2. $\dfrac{4-x^2}{x^2+3x+2}$

3. $\dfrac{x^2-1}{2x^2-x-1}\cdot\dfrac{2x^2+3x+1}{x^2+x}$

4. $\dfrac{x^2+2x-15}{2x^2-5x-3}\cdot\dfrac{x-5}{x^3-25x}$

More Notes 11-2 Mutiplying and Dividing Rational Expressions

Problem 4 Dividing Rational Expressions

What is the quotient $\frac{x^2 - 25}{4x + 28} \div \frac{x - 5}{x^2 + 9x + 14}$?

Got It? 4. What is the quotient?

a. $\frac{x}{x+y} \div \frac{xy}{x+y}$

b. $\frac{4k + 8}{6k - 10} \div \frac{k^2 + 6k + 8}{9k - 15}$

Problem 5 Dividing a Rational Expression by a Polynomial

What is the quotient $\frac{3x^2 - 12x}{5x} \div (x^2 - 3x - 4)$?

Got It? 5. What is the quotient $\frac{z^2 - 2z + 1}{z^2 + 2} \div (z - 1)$?

HW p 674: 18, 20, 24, 25, 32, 33, 34, 35, 37

Multiply. Put work on a separate piece of paper

18. $\frac{b^2+4b+4}{2b^2-8} \cdot \frac{3b-6}{4b}$

20. $\frac{m-2}{3m+9} \cdot \frac{2m+6}{2m-4}$

24. $\frac{2m+1}{3m-6} \cdot (9m^2-36)$

25. $(x^2-1) \cdot \frac{x-2}{3x+3}$

Divide.

32. $\frac{x-1}{x+4} \div \frac{x+3}{x+}$

33. $\frac{3t+12}{5t} \div \frac{t+4}{10t}$

34. $\frac{x-3}{6} \div \frac{3-x}{2}$

35. $\frac{y-4}{10} \div \frac{4-y}{5}$

37. $\frac{2n^2-5n-3}{4n^2-12n-7} \div \frac{4n+5}{2n-7}$