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12-4 Multiplying and Dividing Rational Expressions.....#
 this is the same as yesterday

Left Page:

$$\frac{4}{5} \div \frac{2}{3} = \frac{4}{5} \cdot \frac{3}{2} = \frac{6}{5}$$

$$\frac{7}{8} \div \frac{1}{2} = \frac{7}{8} \cdot \frac{2}{1} = \frac{7}{4}$$

$$\frac{\sqrt{5} + 3\sqrt{5}}{4\sqrt{5}} = \frac{\sqrt{5}(1+3)}{4\sqrt{5}} = \frac{4\sqrt{5}}{4\sqrt{5}} = 1$$

$$\frac{\sqrt{2}(5-\sqrt{14})}{5\sqrt{2} - \sqrt{28}} = \frac{\sqrt{2}(5-\sqrt{14})}{5\sqrt{2} - 2\sqrt{7}}$$

Apr 22-9:25 AM

The rules for dividing rational expressions are the same as the rules for dividing fractions. To divide by a rational expression, multiply by its reciprocal.

Dividing Rational Expressions

If $a, b, c,$ and d are nonzero polynomials, then $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \cdot \frac{d}{c} = \frac{ad}{bc}$.

Apr 15-9:41 AM

Divide. Simplify your answer.

$$\frac{18vw^2}{6v} \div \frac{3v^2x^4}{2w^4x}$$

$$\frac{18vw^2}{6v} \cdot \frac{2w^4x}{3v^2x^4} = \frac{2w^6}{v^2x^3}$$

$$\frac{2}{g} \div \frac{g+4}{g^2} = \frac{2}{g} \cdot \frac{g^2}{g+4} = \frac{2g}{g+4}$$

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Divide. Simplify your answer.

$$\frac{4xy^2}{y} \div (2x^2 + 6x)$$

$$\frac{4xy^2}{y} \cdot \frac{1}{2x(x+3)} = \frac{2y}{x+3}$$

$$\frac{3}{x^2} \div \frac{x^3}{x-5}$$

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Divide. Simplify your answer.

$$\frac{x^2-x}{x+2} \div (x^2+2x-3)$$

$$\frac{x(x-1)}{(x+2)} \cdot \frac{1}{(x+3)(x-1)} = \frac{x}{(x+2)(x+3)}$$

$$\frac{-(n+1)(n-1)}{n^2+1} \div \frac{n(n-4)}{n^2-4n}$$

$$\frac{-(n+1)(n-1)}{n^2+1} \cdot \frac{n^2-4n}{n(n-4)} = \frac{-(n+1)(n-4)}{n^2+1}$$

Apr 22-9:26 AM

Assignment.

p. 882 #19-21, 24, 27-34, 58-60

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