## MAT0028 ~ Lesson 38

Work the following examples as you listen to the recorded lecture.

## Multiplying and Dividing Rational Expressions

Example 1: $\frac{3 x}{y^{2}} \cdot \frac{7 y}{4 x}$
Example 2: $-\frac{5 a^{2} b}{30 a^{2} b^{2}} \cdot b^{3}$

Example 3: $\frac{6 x+6}{5} \cdot \frac{10}{36 x+36}$
Example 4: $\frac{x^{2}-25}{x^{2}-3 x-10} \cdot \frac{x+2}{x}$

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Example 5: $\frac{x^{2}+6 x+8}{x^{2}+x-20} \cdot \frac{x^{2}+2 x-15}{x^{2}+8 x+16}$
Example 6: $\frac{5 x^{7}}{2 x^{5}} \div \frac{15 x}{4 x^{3}}$

Example 7: $\frac{x+2}{7-x} \div \frac{x^{2}-5 x+6}{x^{2}-9 x+14}$
Example 8: $\frac{x^{2}+7 x+10}{x-1} \div \frac{x^{2}+2 x-15}{x-1}$

