

**7.3 Multiplying & Dividing Rational Expressions DAY ONE CYU** Use when you get it right all by yourself**S** Use when you did it all by yourself, but made a silly mistake**H** Use when you could do it alone with a little help from teacher or peer**G** Use when you completed the problem in a group**X** Use when a question was attempted but wrong (get help)**N** Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Simplifying rational expressions	2	1, 3 - 6	
Multiplying rational expressions		7 - 8	
Dividing rational expressions	9	10	

Simplify the following rational expressions.

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

2.  $\frac{4x^6}{2x^4}$

3.  $\frac{x^2 - x^3}{2x^2 - 5x + 3}$

4.  $\frac{x^3 + x^2 - 20x}{x^2 - 16}$

5.  $\frac{3x^2 - 9x - 12}{6x^2 + 9x + 3}$

6.  $\frac{9 - 3x}{15 - 2x - x^2}$

**Multiply. ASSUME all expressions are defined. Simplify completely.**

$$7. \frac{4x+16}{2x+6} \cdot \frac{x^2+2x-3}{x+4}$$

$$8. \frac{x+3}{x-1} \cdot \frac{x^2-2x+1}{x^2+5x+6}$$

**Divide. Assume all expressions are defined. Simplify completely.**

$$9. \frac{5x^6}{x^2y} \div \frac{10x^2}{y}$$

$$10. \frac{x^2-2x-8}{x^2-2x-15} \div \frac{2x^2-8x}{2x^2-10x}$$

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**CYU Reflection:** *How far can you go: basic, intermediate, or advanced?*

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

