Name **Key** Date _____ Pd ____

7.2 Dividing Rational Functions DAY TWO CYU

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Dividing rational expressions	1, 2, 9	3 - 5	6 - 8
Simplifying rational expressions	1, 2, 9	3 - 5	6 - 8

Find each quotient and simplify if possible. Show all work to earn full credit.

1. $\dfrac{5x^7}{2x^5} \div \dfrac{15x}{4x^3}$

$$\dfrac{2x^4}{3}$$

2. $\dfrac{8x^2}{y^3} \div \dfrac{4x^2y^3}{6}$

$$\dfrac{12}{y^6}$$

3. $\dfrac{(x-6)(x+4)}{4x} \div \dfrac{2x-12}{8x^2}$

$$x(x+4)$$

4. $\dfrac{3x^2}{x^2-1} \div \dfrac{x^5}{(x+1)^2}$

$$\dfrac{3(x+1)}{x^3(x-1)}$$

5. $\dfrac{m^2-n^2}{m+n} \cdot \dfrac{m}{m^2+mn}$

$$m^2-n^2$$

6. $\dfrac{x+2}{7-x} \div \dfrac{x^2-5x+6}{x^2-9x+14}$

$$-\dfrac{x+2}{x-3}$$

7. $\dfrac{x^2+7x+10}{x-1} \div \dfrac{x^2+2x-15}{x-1}$

$$\dfrac{x+2}{x-3}$$

8. $\dfrac{x+1}{(x+1)(2x+3)} \div \dfrac{20x+100}{2x+3}$

$$\dfrac{1}{20(x+5)}$$

9. $\dfrac{7a^2b}{3ab^2} \div \dfrac{21a^2b^2}{14ab}$

$$\dfrac{14}{9b^2}$$

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.

| 1 2 | 3 4 5 | 6 7 | 8 |
| Basic | Intermediate | Advanced | Solved ALL! |