

Name Key  
 Bridge to Algebra 2

Date \_\_\_\_\_ Pd \_\_\_\_\_  
 7.1 – 7.5 Quiz Review 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 |
|--------------------------------------|---------|-----------------|----------|
| Equation or Expression               | 1 – 11  |                 |          |
| Adding Rational Expressions          | 6       | 1, 9            |          |
| Subtracting Rational Expressions     |         | 3, 10           |          |
| Multiplying Rational Expressions     | 5       |                 |          |
| Dividing Rational Expressions        |         | 8               |          |
| Solving Rational Equations           | 2       | 4, 7            | 11       |
| Determining the LCD                  | 2, 5, 6 | 1, 3, 4, 7 - 10 | 11       |
| Domain Restriction                   | 2, 5, 6 | 1, 3, 4, 7 - 10 | 11       |
| Checking solutions on the calculator | 2       | 4, 7            | 11       |

Determine whether each of the following is an equation or an expression. If it is an equation, solve it for its variable. If it is an expression, perform the indicated operation. Show all work to earn full credit. Box your final answer includes expression/equation, LCD, Domain Restriction in interval notation, answer, and proof of checking if it is an equation.

1.  $\frac{1}{x} + \frac{2}{3}$       LCD: 3x

$$\frac{3+2x}{3x}$$

2.  $\frac{1}{x} + \frac{2}{3} = \frac{3}{x}$

LCD: 3x

X = 3

3.  $\frac{2}{x-1} - \frac{1}{x}$

LCD: x(x-1)

$$\frac{x+1}{x(x-1)}$$

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

LCD: x(x+1)

X = ±i

5.  $\frac{15x}{x+8} \cdot \frac{2x+16}{3x}$

LCD: 3x(x+8)

10

6.  $\frac{2x+1}{x-3} + \frac{3x+6}{x-3}$

LCD: (x-3)

$$\frac{5x+7}{x-3}$$



$$7. \frac{x+5}{7} = \frac{8}{2}$$

$$\text{LCD: } 14$$

$$x = 23$$

$$8. \frac{5a+10}{18} \div \frac{a^2-4}{10a}$$

$$\text{LCD: } 18(a^2-4)$$

$$\frac{25a}{9(a-2)}$$

$$9. \frac{x+2}{3x-1} + \frac{5}{(3x-1)^2}$$

$$\text{LCD: } (3x-1)^2$$

$$\frac{3x^2 + 5x + 3}{(3x-1)^2}$$

$$10. \frac{x-7}{x} - \frac{x+2}{5x}$$

$$\text{LCD: } 5x$$

$$\frac{4x-37}{5x}$$

$$11. \frac{3}{x+3} = \frac{5}{x^2-9} - \frac{2}{x-3}$$

$$\text{LCD: } (x+3)(x-3)$$

$$x = \frac{8}{5}$$

**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.

