**CR Algebra II Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Operations with Rational Expressions Review Date: \_\_\_\_\_\_\_\_\_ Period: \_\_\_**

**Simplify completely. SHOW ALL WORK!!**!

1 $\frac{r^{2} - 6r+5}{5r^{2}+r-6}$ 1.\_\_\_\_\_\_\_\_\_\_\_\_

2. $\frac{k^{2} + 6k + 9}{k + 3}$ 2.\_\_\_\_\_\_\_\_\_\_\_\_\_

**Multiply. Simplify completely. SHOW ALL WORK!!!**

3. $\frac{p+6}{12p}∙\frac{3p^{5}}{p^{2}-36}$ 3.\_\_\_\_\_\_\_\_\_\_\_\_\_

4. $\frac{y+4}{y^{2}+8y+16}∙\frac{y-3}{5y-15}$ 4.\_\_\_\_\_\_\_\_\_\_\_\_\_

5. $\frac{4x-24}{x^{2}-36}∙\frac{2x^{2}-11x-6}{5x-30}$ 5.\_\_\_\_\_\_\_\_\_\_\_\_\_

**Divide. Simplify completely. SHOW ALL WORK!!!**

6. $\frac{16x^{2}}{8y -x} ÷ \frac{2x^{5}}{8y - x}$ 6.\_\_\_\_\_\_\_\_\_\_\_\_

7. $\frac{p^{2} -9}{5p-15} ÷ \frac{p^{2}+7p+12}{4p+16}$ 7.\_\_\_\_\_\_\_\_\_\_\_\_

8. $\frac{4m+16}{5m+15}÷\frac{m-4}{m^{2}-m-12}$ 8.\_\_\_\_\_\_\_\_\_\_\_\_

**Add or subtract. Simplify completely. SHOW ALL WORK!!!**

9. $\frac{16n}{7} + \frac{18n}{7} - \frac{6n}{7}$ 9.\_\_\_\_\_\_\_\_\_\_\_\_

10. $\frac{7x + 2}{8x + 5} - \frac{4x +11}{8x + 5}$ 10.\_\_\_\_\_\_\_\_\_\_\_\_

11.  11.\_\_\_\_\_\_\_\_\_\_\_\_

12. $\frac{x}{x-7}+\frac{4}{x-8}$ 12.\_\_\_\_\_\_\_\_\_\_\_\_

13. $\frac{2}{n + 7} + \frac{3r}{5\left(n + 7\right)}$ 13.\_\_\_\_\_\_\_\_\_\_\_\_

14. $\frac{x+18}{x^{2}-5x+6}+\frac{5}{x-2}$ 14.\_\_\_\_\_\_\_\_\_\_\_\_