Integrated Math 3 Name: _____

Unit 7: Modeling Rational Representations

7.1 Worksheet Date:_____ Period:_____

Simplifying Rational Expressions Using Multiplication

Simplify the rational expressions, if possible.

1. $\frac{x^2-8x-9}{x^2-1}$

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

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

Multiply. Identify any x-values for which the expression is undefined.

4. $\frac{x^2-5x}{x^3} \cdot \frac{x-2}{x^2-3x-10}$

5. $\frac{x^2-x-12}{x^2+7x+12} \cdot \frac{x^2+6x+8}{x^2-5x+4}$

6. $\frac{10x-40}{x^2-6x+8} \cdot \frac{x+3}{5x+15}$

7. $\frac{x}{15} \cdot \frac{x^7}{2x} \cdot \frac{20}{x^4}$