Multiplying Rational Expressions Video Worksheet Name:_____ Date: _____

Learning Target: I can multiply rational expressions and explain how that is the same as multiplying fractions.

Directions: Follow along with the video multiply and simplify the following Rational Expressions. Also, list all restrictions on the variable.

1. $\frac{70-7x}{2}\cdot\frac{1}{x-10}$	2. $\frac{x^2-2x-80}{x-10}\cdot\frac{1}{x+4}$
3. $\frac{x^2-3x-40}{8x+24}\cdot\frac{x^2-5x-24}{x-8}$	4. You try! $\frac{x^2-3x-18}{x+1}\cdot\frac{x^2+11x+10}{x^2+20x+100}$

Multiplying Rational Expressions: Your Turn

Multiply and simplify the following Rational Expressions. Also, list all restrictions on the variable.

1. $\frac{b^2+3b+2}{8b-32}\cdot\frac{1}{b+1}$	2. $\frac{x-3}{x-10}\cdot\frac{x^2-12x+35}{x^2-8x+15}$
3. $\frac{x^2+8x-9}{10x+90}\cdot\frac{x+10}{8x-8}$	4. $\frac{2x+12}{2x-4}\cdot\frac{x^2-11x+18}{5x-45}$
5. $\frac{2x-16}{x-8}\cdot\frac{x^2-8x+15}{35-2x-x^2}$	6. $\frac{n+7}{2n^2+6n}\cdot\frac{n^2+6n+8}{n^2+11n+28}$