**Unit 3**: Multiplying & Dividing Rational Expressions Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* A **rational expression** is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of two polynomials
* **Simplest form**: when the numerator and the denominator have no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ex) =

**Practice:** Simplify the following.

1.  b)  c) 

**Multiplying Rational Expressions**

**Notes:**

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| --- | --- |
| You Try: | You Try: |

**Dividing Rational Functions**

When dividing rational functions, you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the first fraction by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the second fraction, and simplifying (i.e. canceling, like we did with multiplication) where you can. We call this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Given the expression:** | **Keep – Change - Flip** | **Factor/Simplify** | **Multiply & Reduce** |
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