**MULTIPLYING AND DIVIDING RATIONAL NUMBERS**

To multiply or divide rational *expressions* we use the same techniques as with rational *numbers*.

Ex1. ×

Ex2. ×

Ex3. ÷

**MULTIPLYING AND DIVIDING RATIONAL EXPRESSIONS**

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| For rational expressions and :× with restrictions Q ≠ 0, S ≠ 0÷× with restrictions Q ≠ 0, S ≠ 0, R ≠ 0 |
| **Ex1**. ×\*\*  | **Ex2.** ÷ D: { x ∈ ℝ | x ≠ -5, x ≠ -4, x ≠ -3, x ≠ 2 } |
| **SUMMARY*** Factor numerators and denominators
* Note restrictions on the variables (denominators, and numerators of divisors)
* If applicable, rewrite division as multiplication by the reciprocal
* Write as a single rational expression
* Reduce by cancelling common factors
* Write the simplified rational expression
* Formally state all restrictions on the domain
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