# Lesson Element

# Rules of Fractions Investigation

 **PRODUCT** means **MULTIPLY**

**SUM** means **ADD**

**Can you perform these operations with fractions?**

|  |  |
| --- | --- |
| **Multiply these fractions** | **Add these fractions** |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |
| 1.
 |  |

Which give the same answer in both columns?

Can you spot anything these have in common?

Use this to create other fraction pairs that work.

### Answers

|  |  |
| --- | --- |
| **Multiply these fractions** | **Add these fractions** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
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| 1. **=**
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| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |
| 1. **=**
 | **=** |

Rows 5 and 8 have the same answer in both columns.

The numerator is the same, and the sum of the denominator values equals the numerator value.

Numerical examples:





Algebraic example:

 must have 