Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Target 1:** I can add and subtract fractions.

**Objective:** I can determine a least common denominator of two or more fractions.

Notes

When do we need to find the least common denominator of fractions?

* When we are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fractions with unlike denominators.

Here is how to find out:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1/3** | + | **1/6** | = | ? |
| 1/3 |   | 1/6 |   | pie huh |

|  |  |  |  |
| --- | --- | --- | --- |
| **3** | List the multiples of 3: |   | 3, 6, 9, 12, 15, 18, 21, ... |
| **6** | List the multiples of 6: |   | 6, 12, 18, 24, ... |

Then find the **smallest number** that is the same

|  |  |  |  |
| --- | --- | --- | --- |
|   | multiples of 3: |   | 3, **6**, 9, 12, 15, 18, 21, ... |
|   | multiples of 6: |   | **6**, 12, 18, 24, ... |

The answer is 6, and that is the **Least** Common Denominator.

So let us try using it! We want both fractions to have 6 slices.

* When we multiply top and bottom of **1/3** by 2 we get **2/6**
* **1/6** already has a denominator of 6

And our question now looks like:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2/6** | + | **1/6** | = | **3/6** |   |   |
| 2/6 |   | 1/6 |   | 3/6 |  |  |

Directions: Find the least common denominator (LCD) for each pair of fractions. Use the LCD to write two new equivalent fractions.

1. $\frac{2}{3}$ and $\frac{3}{4}$ 4. $\frac{1}{6}$ and $\frac{1}{3}$

2. $\frac{1}{5}$ and $\frac{3}{10}$ 5. $\frac{3}{7}$ and $\frac{1}{2}$

3. $\frac{5}{8}$ and $\frac{3}{4}$ 6. $\frac{3}{10}$ and $\frac{3}{8}$

7. Tyrone divided a rectangle into thirds. Samantha divided a rectangle of the same size into fourths. How could you divide a rectangle of the same size so that you see both thirds and fourths?

 Tyrone Samantha

Part B: How many twelfths are in each 1/3 section of Tyrone’s rectangle, and how many twelfths are in each ¼ section of Samantha’s rectangle?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_