**Subtraction of Mixed Numbers**

Subtraction of mixed numbers is a little more complicated than addition of mixed numbers since it is sometimes necessary to **borrow**.

*To subtract two mixed numbers:*

* *Step 1 Find the LCD of the fractions*.
* *Step 2 Change the fractions to higher terms with the LCD*.
* *Step 3 Subtract the fractions, borrowing if possible*.
* *Step 4 Subtract the whole numbers*.
* *Step 5 Reduce or simplify the answer if necessary*.

When the fraction in the subtrahend is smaller than the fraction in the minuend, borrowing is not necessary.

**Example**

Subtract 

**Solution**



**Principles of Borrowing**

When the fraction in the subtrahend is larger than the fraction in the minuend, it is necessary to borrow from the whole number.

*When borrowing is necessary, take one (1) away from the whole number, change it to a fraction with the same numerator and denominator, and then add it to the fraction* .

**Examples**

**Example 1**

Borrow 1 from 

**Solution 1**



**Example 2**

Borrow 1 from 

**Solution 2**



The next examples show how to use borrowing when subtracting mixed numbers.

**Example 3**

Subtract 

**Solution 3**



**Example 4**

Subtract .

**Solution 4**



**Example 5**

Subtract 

**Solution 5**



**Subtraction of Mixed Numbers Practice Problems**

**Practice**

Subtract:

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

**Answers**

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 