Subtracting mixed number example 4 1/4 – 1 2/3

**One way to subtract mixed numbers is to subtract the wholes and the fractions separately. This is an explanation using that strategy.**

2/3 is larger than ¼, so I need to use part of the whole number in 4 ¼ before I can subtract 2/3.

1=4/4, so I can rewrite 4 ¼ = 3 5/4.

2/3 is smaller than 5/4, so I can subtract the parts separately:

4-1 and

5/4 – 2/3.

* This satisfies: An explanation in words of why you must convert all or part of the whole number in the minuend into a fraction

3 - 1 = 2

To subtract 5/4 minus 2/3, I need to rename those fractions so they have the same denominator. 12 is a multiple of 4, and 12 is also a multiple of 3, so I can rename these fractions as twelfths.

 and  so  \*

* This satisfies: An explanation in numbers and words of what you are doing to find equivalent fractions with the same denominator

Combine the differences of the whole numbers and the fractions to get the final answer:



* This, together with some of the explanations in the previous segment, satisfy: An explanation using numbers and words of what you are doing and why to find the final answer.

\* An alternate way to write it that is also correct to write



If you do this, however, it will be marked as incorrect, because it’s an incorrect use of equals signs:



**Another way to subtract mixed numbers is to convert the mixed numbers to improper fractions. This is an explanation using that strategy.**

2/3 is larger than ¼, so I need to use part of the whole number in 4 ¼ before I can subtract 2/3.

One way to do this is to convert both of the numbers into improper fractions.





* This satisfies: An explanation in words of why you must convert all or part of the whole number in the minuend into a fraction

To subtract 17/4 minus 5/3, I need to rename those fractions so they have the same denominator. 12 is a multiple of 4, and 12 is also a multiple of 3, so I can rename these fractions as twelfths.

 and 

* This satisfies: An explanation in numbers and words of what you are doing to find equivalent fractions with the same denominator

So now we can subtract the numbers as fractions: 

Because the problem started with mixed numbers, we should convert back to mixed numbers to give our final answer:



* This, together with some of the explanations in the previous segment, satisfy: An explanation using numbers and words of what you are doing and why to find the final answer.