

Standard 5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

[Click here](#) for multiple resources on this standard.

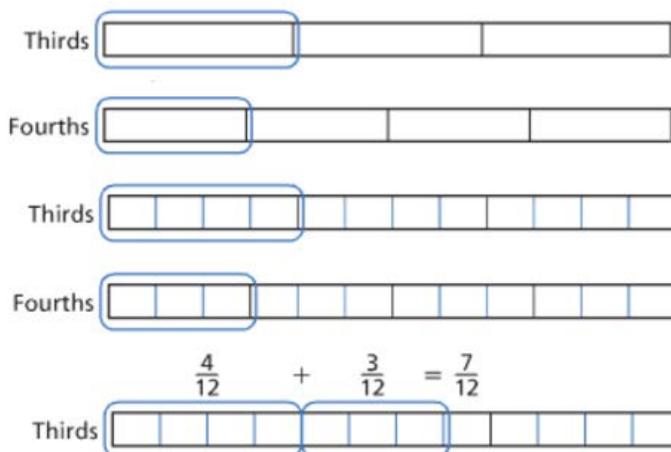
Please Note: Use equivalent fractions as a strategy to add and subtract fractions (Standards 5.NF.1–2).

Key Elements: Adding and subtracting fractions with unlike denominators with the ability to find a common denominator. Students should use their understanding of equivalent fractions to solve. Students should understand that finding an equivalent fraction is the same as multiplying by n/n (or 1)

There are two primary ways to solve when working with mixed numbers: **converting the mixed numbers to fractions greater than 1 or adding the whole numbers and fractional parts separately.** It is good for students to develop a sense of which approach would be better in a particular context.

Students do not necessarily need to find the LEAST common denominator. Any common denominator will work. Have the students compare answers with another student who found the answer using a different denominator. [Click here](#) for a good model and of how this works.

Bar Model:



(From Math Expressions)
1/3

1/4

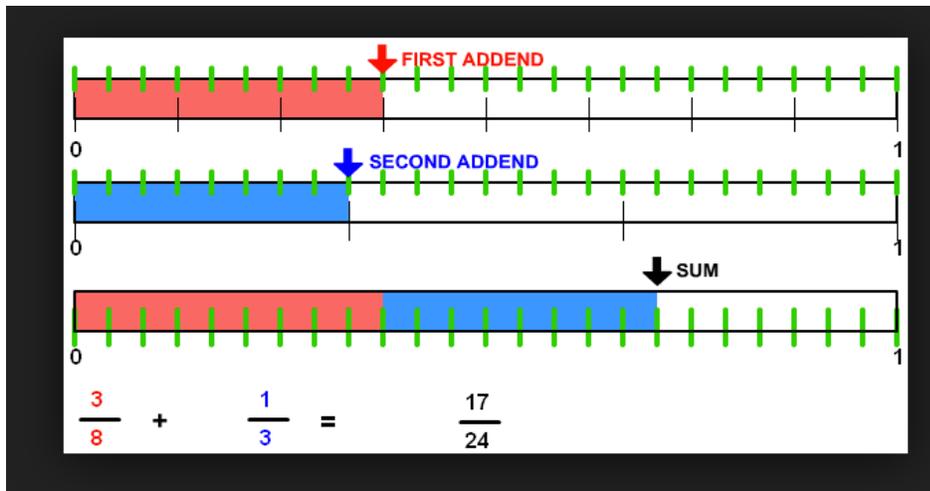
$$\frac{1}{3} \times 44 = 4/12$$

$$\frac{1}{4} \times 3/3 = 3/12$$

Fraction Bars/blocks Worksheet

Number Line:

Each 8th is broken into 3 piece and each 3rd in broken into 8 piece to make 24 piece in one whole. Each of the new pieces is now the same size.



Show students how to draw equivalent sections on a number line. Make sure both number lines are equal.

[Click here](#) for a great resource when adding or subtracting mixed numbers.

Add a mixed number representation, especially for regrouping.

$$3 \frac{3}{4} + 2 \frac{2}{4}$$

