

Y7 Addition and Subtraction of Fractions



What do I need to be able to do?

By the end of this unit you should be able to:

- Convert between mixed numbers and fractions
- Odd/Subtract unit fractions (same denominator)
- Odd/Subtract fractions (same denominator)
- Odd/Subtract fractions from integers
- Use equivalent fractions
- Odd/Subtract any fractions
- Odd/Subtract improper fractions and mixed
- Use fractions in algebraic contexts

Keywords

Numerator: the number above the line on a fraction. The top number. Represents how many parts are taken

Denominator: the number below the line on a fraction. The number represent the total number of parts

Equivalent: of equal value

Mixed numbers: a number with an integer and a proper fraction

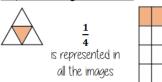
Improper fractions: a fraction with a bigger numerator than denominator

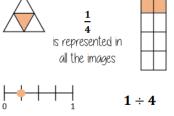
Substitute: replace a variable with a numerical value

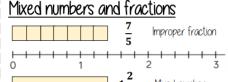
Place value: the value of a digit depending on its place in a number. In our decimal number system, each place is

10 times bigger than the place to its right

Representing Fractions

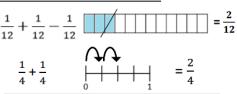








Odd/Subtract unit fractions

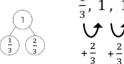


or subtracted

Odd/Subtract fractions

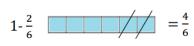


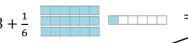
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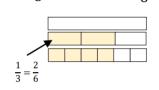
Same denominator i i Odd/Subtract from integers



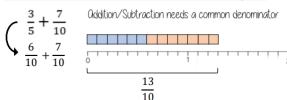


Equivalent

denominator have



Odd/Subtraction fractions (common multiples)



Odd/Subtraction and fractions

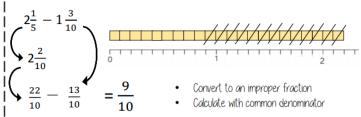
Fractions can be

bigger than a whole



Use equivalent fractions to find a common multiple for both denominators

Odd/Subtraction fractions (improper and mixed)



Partitioning method

$$2\frac{1}{5} - 1\frac{3}{10} = 2\frac{2}{10} - 1\frac{3}{10} = 2\frac{2}{10} - 1 - \frac{3}{10} = 1\frac{2}{10} - \frac{3}{10} = \frac{9}{10}$$

i i Fractions in algebraic contexts

$$z - \frac{5}{8} = 2$$

$$5 \longrightarrow \frac{7}{9}$$

1 | Apply inverse operations Form expressions with fractions

$$\overline{8}$$
 \overline{m}
Substitution

 $b+\frac{7}{9} \longrightarrow b+\frac{7}{9}$

$$\frac{5}{8} + \frac{1}{2}$$

Fractions and decimals

