

Name: _____

Date: _____

Aim: How can we add Rational Numbers?

Do Now:

a) $-10 + 14$

b) $9 + (-45)$

c) $-22 + (-41)$

d) $-20 + 13$

e) $10 + 17 + (-10) + 23 + (-17)$

Consider the expressions below. Simplify each.

1) $-\frac{10}{5}$

2) $\frac{-10}{5}$

3) $\frac{10}{-5}$

4) $\frac{-10}{-5}$

There are three ways to represent the opposite of $\frac{a}{b}$: _____

Write each number as an improper fraction.

a) $3\frac{1}{4}$

b) $-5\frac{1}{6}$

c) $-2\frac{1}{5}$

For rational numbers that are *fractions*, follow these steps:



- 1.) Turn mixed numbers into improper fractions. Place (-) symbol in the numerator.
- 2.) Use fraction/integer rules to add the NUMERATORS.
- 3.) Reduce, if possible.

Guided Practice

a) $-\frac{3}{10} + \left(-\frac{9}{10}\right)$	b) $-\frac{7}{8} + \frac{1}{4}$	c) $-2\frac{1}{2} + -3\frac{3}{4}$	d) $-2\frac{1}{2} + 3\frac{3}{4}$
e) $1.5 + (-5.3)$	f) $-2.3 + (-3.6)$		

Independent Practice

a) $-\frac{5}{6} + \left(-\frac{2}{3}\right)$	b) $5\frac{1}{4} + \left(-1\frac{2}{5}\right)$	c) $0.4 + (-9.1)$	d) $-2.3 + (-3.6)$
e) $20.25 + (-15.711)$	f) $12.48 + (-10.636)$	g) $4 + \left(-1\frac{2}{3}\right)$	h) $-3.1 + (-0.35)$



When adding negative rational numbers that are fractions, it is often easiest to place the negative symbol in the _____.

Rational numbers follow the same rules for adding as _____.