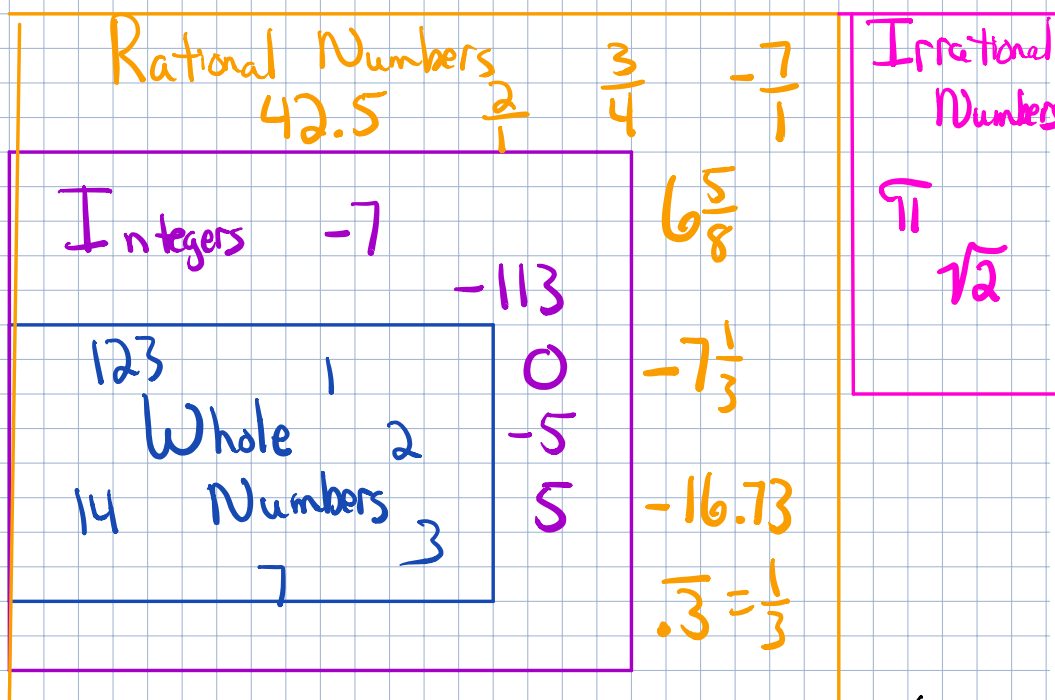


10/14/19

Be able to add rational numbers.

(32)

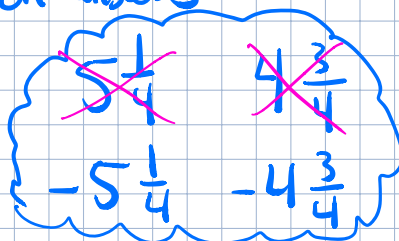
Rational Numbers = Numbers that can be written as fractions.



$$2\frac{3}{4} + (-7\frac{1}{2}) =$$

$$3 - 8 \approx -5$$

Most common answers



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

$$-7\frac{1}{2} = -\frac{2}{4}$$

$$-5\frac{1}{4}$$~~

$$\frac{11}{4} - \frac{15}{2}$$

$$\frac{11}{4} + \frac{-30}{4} = \frac{-19}{4} = -4\frac{3}{4}$$

← $-7\frac{1}{2}$ →

Steps

- ① Make improper
- ② Common denominator
- ③ Throw negatives up into numerator
- ④ Add / Subtract
- ⑤ Simplify

$$-\frac{3}{4} = \frac{-3}{4} = \frac{3}{-4}$$

Examples

$$\frac{3 \cdot 3}{8 \cdot 3} + \left(-\frac{1 \cdot 8}{3 \cdot 1} \right) =$$

≈ less than $\frac{1}{2}$
Close to \emptyset

Fractons

$$\frac{9}{24} + \frac{-8}{24} = \frac{1}{24}$$

$$-1\frac{1}{3} + (-2\frac{5}{6}) = \textcircled{-1+(-3) \approx -4}$$

$$-\frac{4.2}{3.2} + \frac{-17}{6}$$

$$\textcircled{-\frac{8}{6} + \frac{-17}{6}} = \frac{-25}{6} = -4\frac{1}{6}$$

Decimals

Steps

- ① Decide if positive or negative
- ② Combine - add absolute values
Fight - subtract absolute values

$$7.37 + (-10.8) = -3.43$$

$$\textcircled{7+(-11) \approx -4}$$

$$\begin{array}{r} 10.80 \\ -7.37 \\ \hline 3.43 \end{array}$$

$$-45.2 + (-9.3) = -54.5 \textcircled{\approx -54}$$

$$\begin{array}{r} 45.2 \\ + 9.3 \\ \hline 54.5 \end{array}$$

$$-4 + 2.25 = -1.75$$

≈ -2

$$\begin{array}{r} 34.00 \\ - 2.25 \\ \hline 1.75 \end{array}$$