

10/23 Rational Number
Can write as a fraction

Are Decimals Rational Numbers? 16

$$8 = \frac{8}{1} \quad 0.2 = \frac{2}{10}$$

↑
terminating decimal

$0.5 = \frac{5}{10}$

⋮

$$0.1236289$$

$$\frac{1236289}{10,000,000}$$

Repeating Decimal

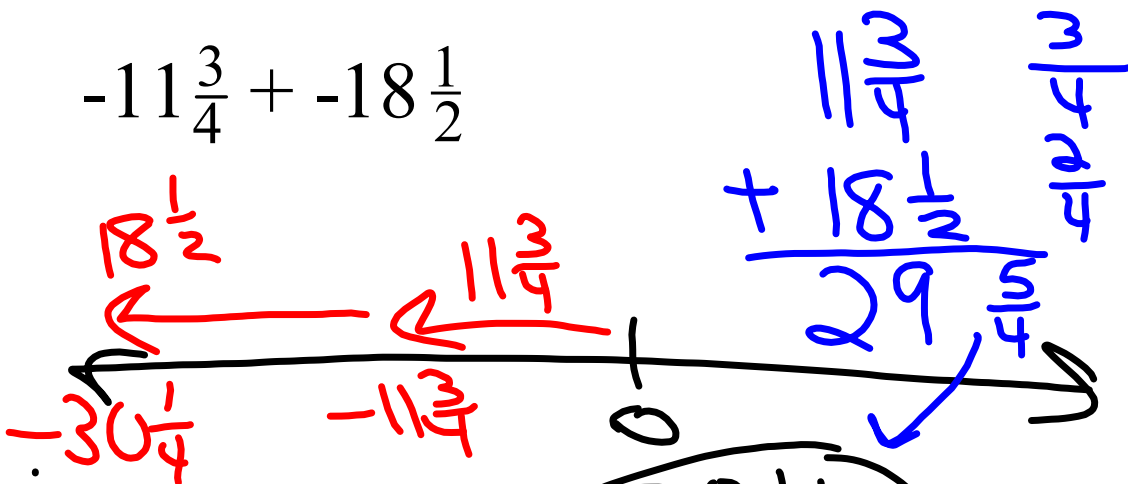
$$0.\overline{2} = \frac{2}{9} \quad 0.\overline{23} = \frac{23}{99}$$

$$0.\overline{562} = \frac{562}{999}$$

Are Decimals Rational Numbers?

Yes, if they terminate or repeat.

$$-11\frac{3}{4} + -18\frac{1}{2}$$



Colin Krueger

Stephan Ramon

$-17\frac{5}{6} + 4\frac{7}{9}$

 $\frac{6, 12, 18}{9, 18}$

$\xrightarrow{-17\frac{5}{6}}$

 $17\frac{5}{6} \rightarrow \frac{15}{18}$

$-17\frac{5}{6}$

 $-4\frac{7}{9} \rightarrow \frac{14}{18}$

$\frac{47}{9}$

 -13

 $+8$

or -13

 $\frac{15}{18}$

or -13

 $\frac{14}{18}$

$$-9\frac{2}{3} + 25$$

$$\begin{array}{r} - \quad 25 \quad 4 \\ \quad \quad \quad \cancel{5} \\ \quad \quad \quad 9 \\ \hline \quad \quad \quad 15 \quad \frac{2}{3} \end{array}$$