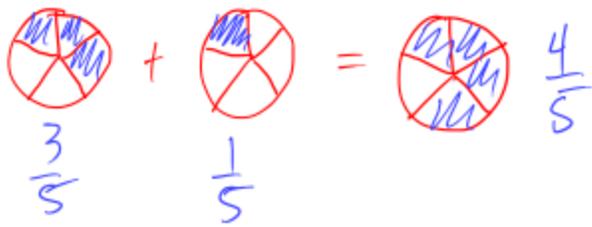


Quiz (3.1-3.3)

Math 9 Section 3.3 – Adding/Subtracting Rational Numbers

Homework: Section 3.3 on Pg. 105; #1-5half, 8-10half, 11-18

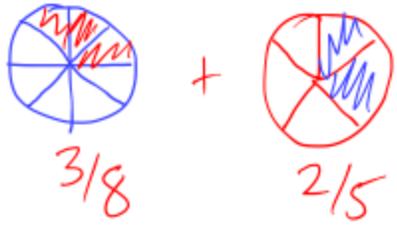
Draw a picture that shows: $\frac{3}{5} + \frac{1}{5}$ then use it to get the answer



Draw a picture that shows: $\frac{4}{7} - \frac{3}{7}$ then use it to get the answer



Draw a picture that shows: $\frac{3}{8} + \frac{2}{5}$ then explain why you can't use it to get the answer



Pieces are NOT the same size
(Different Denominators)

When adding/subtracting two fractions, they must have the same Denominator then you just add or subtract the numerator to get the answer.

Denominator stays the same!

Examples: (Give your answers as mixed **AND** improper fractions)

$$-\frac{17}{10} - \frac{9}{10} = \frac{-17-9}{10}$$

$$= \frac{-26}{10} \div 2 = \frac{-13}{5}$$

mixed: 5 goes into 13 2 times

$$5 \overline{) 13} \begin{array}{r} 2 \\ -10 \\ \hline 3 \end{array} \Rightarrow -2 \frac{3}{5}$$

3 remainder

$$\frac{2}{3} + \frac{5}{8} =$$

$$\frac{2 \cdot 8}{3 \cdot 8} + \frac{5 \cdot 3}{8 \cdot 3}$$

$$= \frac{16}{24} + \frac{15}{24}$$

$$= \frac{31}{24} \text{ Try numbers}$$

Mixed

$$24 \overline{) 31} \begin{array}{r} 1 \\ -24 \\ \hline 7 \end{array} \Rightarrow 1 \frac{7}{24}$$

$$5\frac{1}{9} - 2\frac{4}{9} = \frac{5 \cdot 9 + 1}{9} - \frac{2 \cdot 9 + 4}{9}$$

$$= \frac{46}{9} - \frac{22}{9} = \frac{24}{9} \div 3$$

$$= \frac{8}{3} \Rightarrow 3 \overline{) 8} \begin{array}{r} 2 \\ -6 \\ \hline 2 \end{array} \Rightarrow 2 \frac{2}{3}$$

$$1\frac{2}{5} - 3\frac{1}{15} =$$

$$\frac{5 \cdot 1 + 2}{5} - \frac{3 \cdot 15 + 1}{15}$$

$$\frac{7 \cdot 3}{5 \cdot 3} - \frac{46}{15}$$

$$\frac{21}{15} - \frac{46}{15}$$

$$\frac{-25}{15} \div 5 = \frac{-5}{3}$$

$$3 \overline{) 5} \begin{array}{r} 1 \\ -3 \\ \hline 2 \end{array} \Rightarrow -1 \frac{2}{3}$$