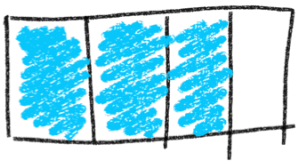
T-MF Math Fundamentals Week 11 11/14

Fractions $= \dfrac{\text{numerator}}{\text{denominator}} = \dfrac{\text{part}}{\text{whole}}$

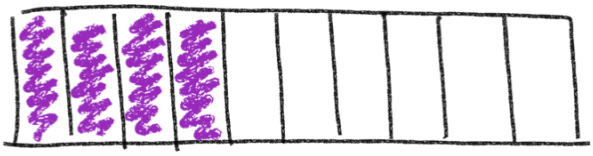
$= \dfrac{3}{8}$ shaded / whole

$= \dfrac{6 \div 3}{9 \div 3} = \boxed{\dfrac{2}{3}}$ Most reduced form

5 $= \dfrac{5}{0}$ ← undefined

1.)  $= \boxed{\dfrac{3}{4}}$

2.) $= \dfrac{6 \div 2}{8 \div 2} = \boxed{\dfrac{3}{4}}$

3.)  $= \dfrac{4 \div 2}{10 \div 2} = \dfrac{2}{5}$

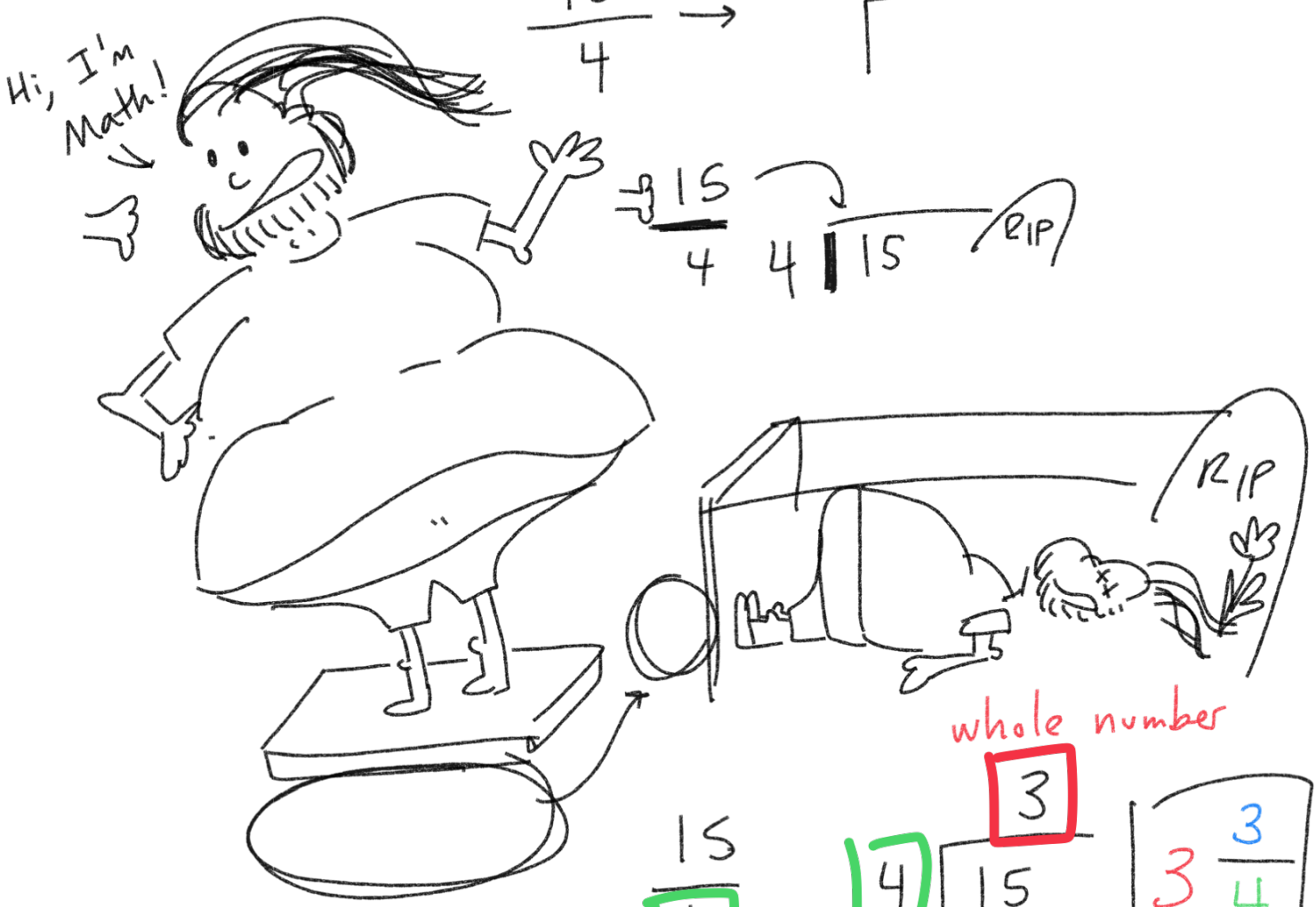
4.) $= \dfrac{4 \div 4}{8 \div 4} = \dfrac{1}{2}$

Improper Fractions "Top Heavy"

$\frac{15}{4}$

Improper fraction → mixed number

$\frac{15}{4} \rightarrow$



$\frac{15}{4}$

$4 \overline{)15}$

whole number

$\boxed{3}$

$\frac{15}{\boxed{4}}$

$\boxed{4}\overline{)15}$

12

$\boxed{3}$

denominator

numerator

$3\frac{3}{4}$

$\frac{13}{2}$

$\begin{array}{r} 6 \\ 2\overline{)13} \\ -12 \\ \hline 1 \end{array}$

$6\frac{1}{2}$

Convert Improper fraction to a mixed number.

1.) $\frac{14}{5}$

$$\begin{array}{r} 2 \\ 5\overline{)14} \\ -10 \\ \hline 4 \end{array} \qquad \boxed{2\frac{4}{5}}$$

2.) $\frac{61}{9}$

$$\begin{array}{r} 6 \\ 9\overline{)61} \\ -54 \\ \hline 7 \end{array} \qquad \boxed{6\frac{7}{9}}$$

3.) $\frac{51}{10}$

$$\begin{array}{r} 5 \\ 10\overline{)51} \\ -50 \\ \hline 1 \end{array} \qquad \boxed{5\frac{1}{10}}$$

4.) $\frac{41}{5}$

$$\begin{array}{r} 8 \\ 5\overline{)41} \\ -40 \\ \hline 1 \end{array} \qquad \boxed{8\frac{1}{5}}$$

This school year Nate has received 78 speeding tickets. If he decided to pass on his penalties to his 9 students, how many would each have to pay? Write as a mixed number.

$\frac{78}{9}$

$$\begin{array}{r} 8 \\ 9\overline{)78} \\ -72 \\ \hline 6 \end{array}$$

reduced

$8\frac{6 \div 3}{9 \div 3}$

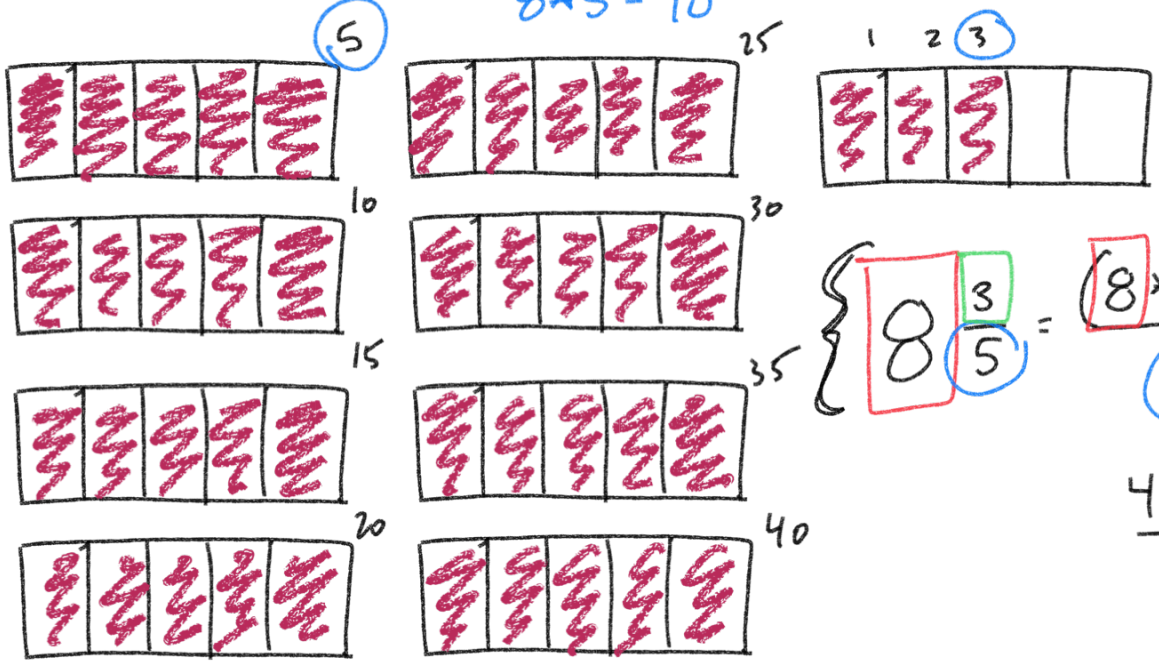
$\boxed{8\frac{2}{3}}$

whole

$8\frac{3}{5} \longrightarrow$ improper fraction $\frac{43}{5}$

$40+3=43$

$8*5=40$



$$8\frac{3}{5} = \frac{(8*5)+3}{5}$$

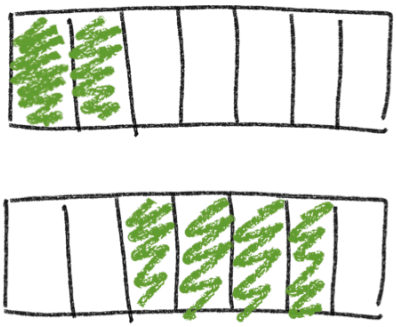
$$\frac{40+3}{5} = \boxed{\frac{43}{5}}$$

$$6\frac{1}{7} = \frac{(6*7)+1}{7} = \frac{42+1}{7} = \boxed{\frac{43}{7}}$$

$$7\frac{2}{3} = \frac{(7*3)+2}{3} = \frac{21+2}{3} = \boxed{\frac{23}{3}}$$

Denominators are the <u>same</u>

$$\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$$

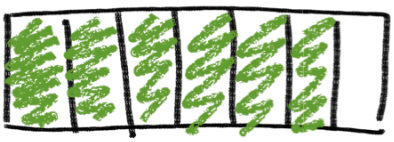


$$= \frac{2}{7}$$

$$+$$

$$= \frac{4}{7}$$

$$\frac{6}{7}$$



$$= \frac{6}{7}$$

$$\frac{1}{5} + \frac{3}{5} = \boxed{\frac{4}{5}}$$

$$\frac{8}{9} - \frac{2}{9} = \frac{6 \div 3}{9 \div 3} = \boxed{\frac{2}{3}}$$

1.) $\frac{1}{6} + \frac{3}{6} = \frac{4 \div 2}{6 \div 2} = \boxed{\frac{2}{3}}$

2.) $\frac{7}{8} - \frac{3}{8} = \frac{4 \div 4}{8 \div 4} = \boxed{\frac{1}{2}}$

3.) $\frac{5}{8} + \frac{7}{8} = \boxed{\frac{12}{8}} = 1\frac{4}{8}$

$\boxed{1\frac{1}{2}}$

$$\begin{array}{r} 1 \\ 8\overline{)12} \\ -\ 8 \\ \hline 4 \end{array}$$

4.) $\frac{3}{4} + \frac{2}{4} = \frac{5}{4} = \boxed{1\frac{1}{4}}$

$$\begin{array}{r} 1 \\ 4\overline{)5} \\ -4 \\ \hline 1 \end{array}$$