L1-2 Multiply/Divide Decimals pg.5

A) ×

ex) $12.5 \times 4 = ?$ → estimate: $13 \times 4 = 52$

$$\begin{array}{r} {\scriptstyle 1\ 2}\ 12.5 \\ \times\quad 4 \\ \hline 50.0 \end{array}$$

→ one # right

move one left

$= 50$ ☺

Step 1: Align to right vertically

2: multiply

3: Adjust decimals

↳ count # of places right of decimal then move left

B) ÷

ex) $1.8 \div 0.045 = ?$ → $\frac{1.8}{0.045}$ (1.8 = in, 0.045 = out)

$0.045 \overline{)1.800}$ ← add zeros

3 3

divisor ↗ dividend

$$\begin{array}{r} 40 \\ 45\overline{)1800} \\ -180\downarrow \\ \hline 00 \\ -0 \\ \hline \not{0} \end{array}$$

Step 1: Get rid of any decimal places in divisor & make into whole #.

2: Adjust & move that many places in dividend

3: rewrite

L1-3 +/-/x/÷ Fractions Pg. 7

A) +/- w/same denominator

ex) $10\frac{3}{4} + 3\frac{2}{4} =$

10	$\frac{3}{4}$	$3+2=5$
+ 3	$\frac{2}{4}$	
↓		
13	$\frac{5}{4}$	

Step 1: Add whole # & numerators

2: keep denominator same

↑ improper so ÷

$\frac{5}{4}$ | 5 → $1\frac{1}{4}$

−4

1

Then, add to whole #

$13 + 1\frac{1}{4}$

$14\frac{1}{4}$

B) +/- different denominator

ex) $11\frac{1}{4} = \frac{}{16}$

$-\ 2\frac{1}{16} = \frac{}{16}$

↑ LCM

multiples

x1	x2	x3	x4
4: 4, 8, 12, 16			
16: 16			

least common multiple: 16 (LCM)

Step 1: Find a common denominator

2: x to get LCM

3: Then follow steps for same denominator

11	$\frac{1}{4}$	(x4) =	4
		(÷x4)	16
− 2	$\frac{1}{16}$	(x1 = x1)	$\frac{1}{16}$
↓			
9	$\frac{3}{16}$		

$\frac{4-1}{16} = \frac{3}{16}$

$= 9\frac{3}{16}$

→