

5. [6 pts] Explain why a common denominator is necessary for adding and subtracting fractions. (1 or 2 sentences)

The whole(s) must be separated into same-size pieces to name the answer as a fraction.

(-6) not CD gives wrong answer  
 (-3) "name" w/o reference to whole.

6. [8 pts] Subtract entirely in mixed number notation:  $7\frac{1}{3} - 2\frac{3}{4}$ . Show clear work.

$$\begin{array}{r} 7\frac{1}{3} \\ - 2\frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 6\quad 16 \\ \cancel{7}\quad \cancel{4}\frac{1}{12} \\ - 2\frac{9}{12} \\ \hline \boxed{4\frac{7}{12}} \end{array}$$

$$\frac{1}{3} \rightarrow \frac{4}{12}$$

(FLF)

(-8) not mixed numbers

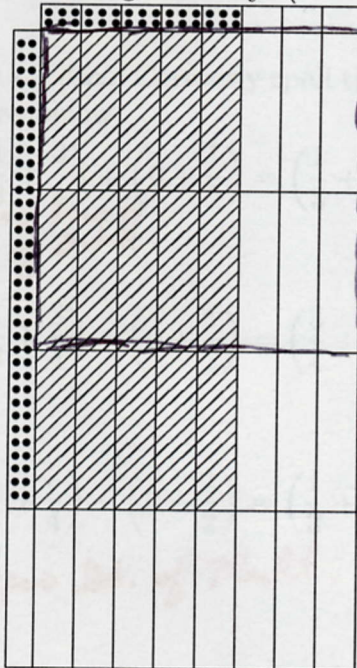
(-6)  $\frac{4}{12} \rightarrow \frac{14}{12}$ .

7. [6 pts] Write the number of one problem among Problems #1-6 on this exam in which you used the Fundamental Law of Fractions. Then write and circle the initials "FLF" next to where you applied it in that problem.

(-6) not  $\frac{n}{n}$ .

# 3, 4, or 6

8. [8 pts] Daphne drew the following diagram to compute  $\frac{5}{8} \times \frac{3}{2}$ . She claims that her picture shows that the denominator of the product should be 32. Explain whether she is right or wrong and why. (1 or 2 sentences)



She's ~~also~~ wrong.  
 The correct whole only has 16 pieces.  
 She's counting the entire picture, which is more than 1 whole.

(-5) 24  
 (-8) "she's right"