

Reminder: A first draft of your term paper is due on April 6.

- (1) (a) Use only the fractions $\frac{1}{8}$, $\frac{1}{4}$, and $\frac{1}{3}$, and the operations $+$ and $-$ to get names for the following fractions. (You are allowed to repeat $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{3}$, $+$, and $-$ as much as you like, and you don't have to use all of them.)

(i) $\frac{1}{2}$	(ii) $\frac{7}{12}$	(iii) $\frac{11}{24}$
(iv) $\frac{1}{6}$	(v) 1	(vi) $\frac{7}{24}$

- (b) Use $\frac{1}{2}$ and $\frac{2}{5}$ and the operations $+$ and $-$ to get names for nine different positive fractions that are less than or equal to 1. List them in order from lowest to highest. (Be sure you don't count different names for the same fraction.)

- (2) Fill in the blanks.

(a) $\frac{7}{8} = \frac{\quad}{16}$	(b) $\frac{3}{5} = \frac{\quad}{45}$	(c) $\frac{3}{4} = \frac{\quad}{12}$
(d) $2\frac{5}{12} = \frac{\quad}{60}$	(e) $1\frac{2}{7} = \frac{\quad}{35}$	(f) $\frac{5}{8} = \frac{\quad}{32}$
(g) $5\frac{6}{7} = \frac{\quad}{14}$	(h) $5\frac{3}{5} = \frac{\quad}{25}$	(i) $\frac{11}{12} = \frac{\quad}{72}$
(j) $\frac{1}{2} = \frac{\quad}{78}$	(k) $3\frac{7}{10} = \frac{\quad}{50}$	(l) $\frac{2}{3} = \frac{\quad}{51}$

- (3) Henry spends $\frac{3}{14}$ of his monthly income for rent and $\frac{2}{11}$ of what is left on food. If he has \$540 left, what is his monthly income? (Hint: Pictures really help.)
- (4) If I cut a pancake with one straight cut, I get two pieces. With two cuts I get four pieces. With three cuts, I can get either six pieces or seven, depending how I cut.



Suppose I always want as many pieces as possible. Fill out the table below to show the most number of pieces I could get.

Cuts	1	2	3	4	5	6	7	10	100	♣
Maximum number of pieces	2	4	7							

- (5) Write an essay expanding on your experience—as far as you remember—of learning fractions in elementary school. Describe one or two situations in detail. What made them stand out? What did you do, and what did the teacher do to make them good/bad experiences? How can you use this experience in *your* future teaching?