03.4.21

2. SUBTRACT

a) $\frac{8}{15} - \frac{4}{9}$

LCM = 45

3	9, 15
3	3, 5
	1, 5

$\frac{8 \times 3 - 4 \times 5}{45} = \frac{24 - 20}{45} = \frac{4}{45}$

b. $\frac{11}{13} - \frac{5}{7}$

$\frac{77 - 65 = 12}{91 = 91}$

$\frac{11 \times 7 \quad 5 \times 13}{91}$ LCM = $13 \times 7 = 91$

c. $\frac{13}{17} - \frac{7}{10}$

LCM = $17 \times 10 = 170$

$\frac{13 \times 10 \quad -7 \times 17}{170}$

$\frac{130 - 119}{170} = \frac{11}{170}$

d) $\frac{15}{19} - \frac{9}{13}$

lcm = 19×13

$\frac{15 \times 13 - 9 \times 19}{247}$ ~~$\frac{24}{247}$~~

$\frac{195 - 171}{247} = \frac{24}{247}$

06.9.21

HW 2. Subtract

e) $\frac{7}{9} - \frac{4}{15}$

$\frac{7 \times 5}{9 \times 5} = \frac{35}{45}$

$\frac{4 \times 3}{15 \times 3} = \frac{12}{45}$

3	9, 15
3	3, 5
5	1, 5
	1 1

$3 \times 3 \times 5 = 45$

$\frac{35}{45} - \frac{12}{45} = \frac{23}{45}$

f. $\frac{16}{27} - \frac{7}{18}$

$\frac{16 \times 2}{27 \times 2} = \frac{32}{54}$

$\frac{7 \times 3}{18 \times 3} = \frac{21}{54}$

3	27, 18
3	9, 6
3	3, 2
2	1, 2
	1, 1

$3 \times 3 \times 3 \times 2 = 54$

$\frac{32}{54} - \frac{21}{54} = \frac{11}{54}$

g) $13\frac{7}{9} - 8\frac{5}{12}$

$\frac{124}{9} - \frac{101}{12}$

$\frac{124 \times 4}{9 \times 4} = \frac{496}{36}$

$\frac{101 \times 3}{12 \times 3} = \frac{303}{36}$

3	9, 12
3	3, 4
4	1, 4
	1 1

$3 \times 3 \times 4 = 36$

$\frac{496 - 303}{36} = \frac{193}{36}$

Hw
3.08.22

h) $6\frac{3}{17} - \frac{4}{1}$

$\frac{105}{17} \quad \frac{4}{1}$

17	17, 1
	1 1

LCM = 17

$\frac{105 \times 1}{17 \times 1} = \frac{105}{17}$ $\quad \frac{4 \times 17}{1 \times 17} = \frac{68}{17}$

$\frac{105 - 68}{17} = \frac{37}{17}$

i) $30\frac{3}{4} - \frac{25}{1}$

$\frac{123}{4} - \frac{25}{1}$

2	4, 1
2	2, 1
	1, 1

$2 \times 2 = 4$

$\frac{123 \times 1}{4 \times 1} = \frac{123}{4}$

$\frac{25 \times 4}{1 \times 4} = \frac{100}{4}$

$\frac{123 - 100}{4} = \frac{23}{4}$

HW
3.8.21

j) $20\frac{7}{12} - \frac{15}{1}$

$\frac{247}{12} - \frac{15}{1}$

12	12 1 2	12,1
	3 2	6,1
	3	3,1
		1 1

$2 \times 2 \times 3 = 12$

$\frac{15 \times 12 = 180}{1 \times 12 = 12}$

$\frac{247}{12} - \frac{180}{12} = \frac{67}{12}$

$\frac{247 \times 1}{12 \times 1} = \frac{247}{12}$

k) $12\frac{7}{8} - 11\frac{1}{2}$

$\frac{103}{8} - \frac{23}{2}$

2	2,8
2	1,4
2	1,2
	1 1

$2 \times 2 \times 2 = 8$

$\frac{103 \times 1}{8 \times 1} = \frac{103}{8}$

$\frac{103}{8} - \frac{92}{8} = \frac{11}{8}$

$\frac{23 \times 4}{2 \times 4} = \frac{92}{8}$

HW

3.09.21

1) $100\frac{1}{4} - \frac{99}{1}$

$\frac{401}{4} - \frac{99}{1}$

$\frac{401 \times 1}{4 \times 1} = \frac{401}{4}$

$\frac{99 \times 4}{1 \times 4} = \frac{396}{4}$

4	4, 1
	1, 1

LCM = 4

$\frac{401 - 396}{4} = \frac{5}{4}$

ADD

e) $\frac{5}{16} + \frac{7}{10} + \frac{2}{5}$

$\frac{5 \times 5 = 25}{16 \times 5 = 80}$

$\frac{7 \times 8}{10 \times 8} = \frac{56}{80}$

$\frac{2 \times 16}{5 \times 16} = \frac{32}{80}$

2	16, 10, 5
2	8, 5, 5
2	4, 5 5
2	2, 5 5
5	1, 5 5
	1 1 1

$2 \times 2 \times 2 \times 2 \times 5 = 80$

$\frac{25}{80} + \frac{56}{80} + \frac{32}{80} = \frac{113}{80}$

HW
3.9.21

f) $\frac{16}{25} + \frac{9}{10} + \frac{3}{8}$

$16 \times 8 = 128$

$25 \times 8 = 200$

$9 \times 20 = 180$

$10 \times 20 = 200$

$3 \times 25 = 75$

$8 \times 25 = 200$

5	25, 10, 8
5	5, 2, 8
2	1, 2, 8
2	1, 1, 4
2	1, 1, 2
	1, 1, 1

$5 \times 5 \times 2 \times 2 \times 2 = 200$

g) $1\frac{1}{4} + 3\frac{3}{8}$

$\frac{5}{4} + \frac{27}{8}$

$5 \times 2 = 10$

$4 \times 2 = 8$

$27 \times 1 = 27$

$8 \times 1 = 8$

2	4, 8
2	2, 4
2	1, 2
	1, 1

$2 \times 2 \times 2 = 8$

$\frac{10}{8} + \frac{27}{8} = \frac{37}{8}$

03.8.21

Hw

ADD

A) $3\frac{1}{3} + 7\frac{5}{6} + 5\frac{1}{2}$

$\frac{10}{3} + \frac{47}{6} + \frac{11}{2}$

3	3, 6, 2
2	1, 2, 2
	1, 1, 1

$3 \times 2 = 6$

$\frac{10 \times 2}{3 \times 2} = \frac{20}{6}$

$\frac{47 \times 1}{6 \times 1} = \frac{47}{6}$

$\frac{11 \times 3}{2 \times 3} = \frac{33}{6}$

$\frac{20}{6} + \frac{47}{6} \frac{133}{6} = \frac{100}{6}$

i) $6\frac{5}{14} + \frac{20}{1} + 7\frac{3}{7} + 8\frac{1}{12}$

$\frac{89}{14} + \frac{20}{1} + \frac{52}{7} + \frac{103}{12}$

2	14, 1, 7, 12
2	7, 1, 7, 6
3	7, 1, 7, 3
7	7, 1, 7, 1
	1, 1, 1, 1

$2 \times 2 \times 12 \times 7 = 84$

$\frac{89 \times 6}{14 \times 6} = \frac{534}{84}$

$\frac{20 \times 84}{1 \times 84} = \frac{1680}{84}$

03.8.21
HW

$$\frac{52 \times 12}{7 \times 12} = \frac{624}{84}$$

$$\frac{103 \times 7}{12 \times 7} = \frac{721}{84}$$

$$\frac{534 + 1680 + 624 + 721}{84} = \frac{3,559}{84}$$