2. Subtract the following fractions:

a) $\frac{8}{15} - \frac{4}{9} = \frac{8\times3 - 4\times5}{45}$

$= \frac{24 - 20}{45} = \frac{4}{45}$

b) $\frac{11}{13} - \frac{5}{7} = \frac{11\times7 - 5\times13}{91}$

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

Rough

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

7 | 13, 7
13 | 13, 1
1, 1

(c) $\frac{13}{17} - \frac{7}{10} = \frac{13\times10 - 7\times17}{170}$

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

(d) $\frac{15}{19} - \frac{9}{13} = \frac{15\times13 - 9\times19}{247}$

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

(e) $\frac{7}{9} - \frac{4}{15} = \frac{7\times5 - 4\times3}{45}$

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

(f) $\frac{16}{27} - \frac{7}{18} = \frac{16\times2 - 7\times3}{54}$

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

Rough

130
-119
11

(19, 13)

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

3(37, 18
3(9, 6
3(3, 2
2(1, 2
1, 1

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

$\frac{124}{9} - \frac{101}{12} = \frac{124 \times 4 - 101 \times 3}{36}$

$= \frac{496 - 303}{36} = \frac{193}{36} = 5\frac{13}{36}$

Rough

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

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

$\frac{105}{17} - 4 = \frac{105 \times 1 - 4 \times 17}{17}$

$= \frac{105 - 68}{17} = \frac{37}{17} = 2\frac{3}{17}$

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

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

$= \frac{123 - 100}{4} = \frac{23}{4} = 5\frac{3}{4}$

j) $\frac{20Z}{13} - 15 =$

$\frac{247}{13} - 15 = \frac{247 \times 1 - 15 \times 12}{12}$

$= \frac{247 - 180}{12} = \frac{67}{12} = 5\frac{7}{13}$

k) $\frac{103}{8} - \frac{33}{2} =$

$\frac{103}{8} - \frac{33}{2} = \frac{103 \times 1 - 33 \times 4}{8}$

$= \frac{103 - 92}{8} = \frac{11}{8} = 1\frac{3}{8}$

l) $\frac{1001}{4} - 99$

$\frac{1001}{4} - 99 = \frac{1001 \times 1 - 99 \times 4}{4}$

$= \frac{1001 - 396}{4} = \frac{5}{4} = 1\frac{1}{4}$

Rough

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