

### Extension

(change to same denominators)

11/9/17

$$\frac{1}{6} = \frac{100}{600}, \frac{1}{25} = \frac{24}{600}, \frac{3}{5} = \frac{360}{600}, \frac{3}{20} = \frac{90}{600}, \frac{4}{15} = \frac{160}{600}, \frac{5}{8} = \frac{375}{600}$$

$$\frac{100 + 24 + 360 + 90 + 160 + 375}{600} = 1 \frac{509}{600}$$

so we need to take away approximately  $\frac{5}{6}$  away using above fractions

or to make it simple; take away some of ~~the~~ <sup>these</sup> to make and make it equal 509.

100  
24  
360  
90  
160  
375

$$375 + 100 + 24 = 499$$

$$360 + 160 = 520$$

$100 + 24 + 90 + 160 = 374$  which is nowhere near to 509. Therefore one of either 360 or 375 must be used (both is too much).

$$375 + 100 + 24 = 499 \text{ which is } -10 \text{ to } 1$$

Is there a way to add 10 to this. If we took 375 to 360 and ~~100 to 90~~ we have  $25 + \text{the extra } 10 = 35$  but there is not a ~~number~~ number close to ~~the~~ 50. So the closest to 509 we can get to is  $375 + 100 + 24$ .

$375 + 100 + 24$  is the  $\frac{3}{5} + \frac{1}{6} + \frac{1}{25}$ . So adding up all but these three would give the total of  $1 \frac{15}{600} = 1 \frac{1}{60}$

Therefore the closest we can get to the answer of 1 is

$$\underline{\underline{1 \frac{1}{60}}} \text{ by adding together } \frac{3}{5}, \frac{3}{20}, \frac{4}{15}$$