Almost One

- Our first step will be to convert all the fractions into decimals. This is because it is much easier to identify which numbers to use.

$\therefore$ We get :

0.1666˙	($1/6$)
0.04	($1/25$)
0.6	($3/5$)
0.15	($3/20$)
0.2666˙	($4/15$)
0.625	($5/8$)

The number of combinations possible is (6!) or 6 factorial. 6! = 720 different solutions and combinations.

If we take ☐0.625 (the largest number) and add it to ☐0.2666˙, which brings our sum close to 90, we obtain the following:

```
 0.625
+0.266
───────
 0.891
```

We can continue: 0.891
- $+0.1666˙ = 1.0576˙$
- $+0.15 = 1.041$ closest so far
- $+0.04 = 0.931$

Now that we have obtained a close result, we will use numbers which are smaller than our current numbers.
$\therefore$ We will use numbers ☐0.6 instead of ☐0.625.
This will make our answer 0.025 less.
$\therefore$ Our equation now is ☐0.6 + ☐0.15 + ☐0.266˙ = 1.016˙ New answer

Learn how to test my answer in the evaluation ➤

Another thing to observe is that if we want an answer smaller than our current, we will have to subtract a minimum of $0.03\overline{199}$ from our sum. This is because $1.01\overline{6}$ is $0.1\overline{6}$ away from 1. So in order to make it closer subtracting less than 0.032 is mandatory.

It is certain that 0.6 will stay the same since no addition to any other two numbers will reach some thing $0.31\overline{99}$ smaller. This statement infact applies to 0.15 and 0.26̄66. Futhermore, the only number smaller than 0.15 is 0.04 which obviously cannot take 0.15's space.

∴ 0.26̄66 will also not be changed since the only two which come close are 0.04 and 0.1̄666 which give a result of 0.2066.

- • THE CLOSEST RESULT WE GET
- • • IS 1.016 WHICH IS 0.016 AWAY FROM ONE.

This is made by.

$$\frac{3}{5} + \frac{4}{15} + \frac{3}{20}$$

$$\frac{36 + 16 + 9}{60} = \frac{61}{60}$$