

Wednesday 29<sup>th</sup> Jun 2022

The four consecutive numbers sum to 130 is

$$\begin{array}{r} 31 \\ 32 \\ 33 \\ 34 \end{array} \Bigg\} 130$$

because like if you take away 10 and divide it

you have 10 spread to the 4 numbers

$$\begin{array}{r} \text{the add to} \\ 30 \\ 30 \end{array} \Bigg\} \begin{array}{r} 8 \\ 9 \\ 10 \\ 11 \end{array} \Bigg\} 38$$

Sum of 3 consecutive numbers is 10 more than the 4<sup>th</sup> number

$$\begin{array}{r} 118 \\ - 39 \\ \hline 79 \end{array} \Bigg\} \begin{array}{r} 10 \\ 11 \\ 12 \\ 13 \end{array} \Bigg\} 39$$

spread across

$$\begin{array}{r} 23 \\ + 12 \\ \hline 35 \end{array}$$

what is (a+d) - (b+c) = 0

$$\begin{array}{r} 10+13 \\ 23 \\ \hline 11 \\ 11 \\ 12 \\ 13 \end{array}$$

so when add a and b+c will make the same number and will = 0

EXPLORE

$$\begin{array}{r} a+b+c-d \\ 3+4+5-6 \\ \hline 12-6=6 \\ 6-7+8-9 \\ \hline 12-9=3 \end{array}$$

and to get to the next number you add 1 so the next number would be a+1 so like a+d would be adding 3 so a+3 and then b+c would be similar as to a+3

$$a+b+c = d$$

$$\begin{array}{r} 1 \\ 2 \\ 3 \end{array} \begin{array}{r} 3-4=2 \\ 4-5=1 \end{array}$$

it would be increment by 2 every consecutive numbers

$$(a+d) - (b+c)$$

$$\begin{array}{r} 3 \\ 4 \\ 5 \end{array} - \begin{array}{r} 4 \\ 5 \end{array} = 0$$

