

Wednesday 29th June 2022

$$a + b + c + d = 180 \quad 1 \text{ (on)}$$

$$30 + 30 + 30 + 40 = 180$$

four consecutive numbers adding to 180:

$$\underbrace{41, 42, 43, 44}_{63 + 87} \quad \underbrace{31, 32, 33, 34}_{63 + 67}$$

$$170 \quad 180$$

2. 1(b) The four consecutive numbers sum to -38

$$\underbrace{-7, -8, -9, -10}_{-17 - 19} \quad \underbrace{-8, -9, -10, -11}_{-17 - 21}$$

$$82 \quad = -38$$

2) (a, b, c, d)
 $a + b + c = 10 + d$

$$1 + 2 + 3, 10 + d \quad 8, 9, 10, 10 + 11$$

$$7 + 8 + 9 \neq 10 + 10 \quad 27 \quad 21$$

$$24 \quad 20 \quad 4, 5, 6 = 10 + 7$$

$$16 \quad 17$$

$$5 + 6 + 7 = 10 + 8$$

$$18 \quad 18$$

19/6/2022

Investigating consecutive numbers

1 a) four consecutive numbers sum to 130

31, 32, 33, 34
I got this because I know that $1 + 2 + 3 + 4 = 10$ and 30×4 is 120, and add those together equals 130

1 b) four consecutive numbers sum to -38
-8, -9, -10, -11
I used trial and error.

2) the first three consecutive numbers is ten more than the fourth
5, 6, 7, 8
I started at 7, 8, 9, 10, then worked backwards until I got

The right combinations.

3) what is $(a+d) - (b+c)$

I predict it will be 0. $(7+10) - (8+9) = 0$. we tried a lot of combinations and all the outcomes were 0. $2a + 3 = 2a + 3$.

