Arbeitsblatt 1.1 am 08.11.22 von Stevan Vlajic

Bsp's) 5d, 2e, 1d

+2 +2 +4 +8 +2

5d) $\langle a_n \rangle = \langle 6, 8, 12, 20, 36, 68 \rangle$

$a_n = 2^n + 4$

$a_1 = 6$

$a_n = a_{n-1} + 2^{n-1}$

~~$a_n = a_{n-1} + d$~~

~~$a_n = 2^{n-1} + 6$~~

2e) $a_1 = 1$

$a_2 = 2$

$a_{n+2} = \frac{a_n - a_{n+1}}{2}$

$a_3 = \frac{1-2}{2}$, $a_4 = \frac{2 + \frac{1}{2}}{2} = 1{,}25$

$a_5 = \frac{-\frac{1}{2} - 1{,}25}{2} =$

$a_6 = \frac{1{,}25 + 0{,}88}{2} =$

$\langle a_n \rangle = \langle 1, 2, -\frac{1}{2}, 1{,}25, -0{,}88, 1{,}07 \rangle$

1d) $a_n = n^3 - n^2 + 2$

$a_n = \langle 2, 6, 20, 50, 102, 182, 296, 456 \rangle$