1142. $a_1 = 2$ $\quad a_8 = a_1 + (n-1)\cdot d$ $\quad a_{15} = a_1 + (n-1)\cdot d$

$a_8 = 23$ $\quad a_8 = a_1 + 7d$ $\quad a_{15} = 2 + 14\cdot 3$

$a_{15} = ?$ $\quad 23 = 2 + 7d$ $\quad \mathbf{a_{15} = 44}$

$7d = 21$

$a_n = a_1 + (n-1)\cdot d$ $\quad \mathbf{d = 3}$

1145. $a_1 + a_2 + a_3 = 27$ $\quad a_n = a_1 + (n-1)\cdot d$

$a_1^2 + a_2^2 + a_3^2 = 275$ $\quad a_2 = a_1 + d$

$d > 0$ (растући низ) $\quad a_3 = a_1 + 2d$

$(a_1, a_2, a_3, a_4 \ldots)$?

$a_1 + a_1 + d + a_1 + 2d = 27$

$a_1^2 + (a_1 + d)^2 + (a_1 + 2d)^2 = 275$

$3a_1 + 3d = 27 \,/ :3$

$a_1^2 + a_1^2 + 2a_1 d + d^2 + a_1^2 + 4a_1 d + d^2 = 275$

$\mathbf{a_1 + d = 9} \Rightarrow a_1 = 9 - d$

$3a_1^2 + 6a_1 d + 5d^2 = 275$

$3(9-d)^2 + 6(9-d)\cdot d + 5d^2 = 275$

$3\cdot(81 - 18d + d^2) + 54d - 6d^2 + 5d^2 = 275$

$243 - 54d + 3d^2 + 54d - d^2 = 275$

$2d^2 = 32$

$d^2 = 16$

$\mathbf{d_1 = 4}$ V ~~$d_2 = -4$~~

$a_1 = 9 - d$

$a_1 = 9 - 4$

$\mathbf{a_1 = 5}$

↓

$a_2 = 5 + 4 = \mathbf{9}$

$a_3 = 5 + 2\cdot 4 = \mathbf{13}$

$a_4 = 5 + 3\cdot 4 = \mathbf{17}$

↓

5,9,13,17...

*** d>0 јер је аритметички низ растући**

Милица Савић III-3