

Zadatak 36. U nekom je aritmetičkome nizu $a_1 + a_3 + a_5 + \dots + a_{11} = 72$. Koliko je $a_1 + a_6 + a_{11}$?

Rješenje.

$$a_1 + a_3 + a_5 + \dots + a_{11} = 72$$

$$a_1 + a_1 + 2d + a_1 + 4d + \dots + a_1 + 10d = 72$$

$$6a_1 + 2d(1 + 2 + 3 + 4 + 5) = 72$$

$$6a_1 + 30d = 72 \quad / : 6$$

$$a_1 + 5d = 12$$

$$\begin{aligned} a_1 + a_6 + a_{11} &= a_1 + a_1 + 5d + a_1 + 10d \\ &= 3a_1 + 15d = 3(a_1 + 5d) = 3 \cdot 12 = 36. \end{aligned}$$