I $2a + 2b + 2c = 10$
II $b + c = 4$
III $4c = 6$

III $4c = 6 \quad |:4$
$\Leftrightarrow c = \frac{6}{4} = 1{,}5$

III in II:
$b + 1{,}5 = 4 \quad |-1{,}5$
$\Leftrightarrow b = 2{,}5$

II und III in I:
$2a + 2 \cdot 2{,}5 + 2 \cdot 1{,}5 = 10$
$\Leftrightarrow 2a + 5 + 3 = 10 \quad |-8$
$\Leftrightarrow 2a = 2 \quad |:2$
$\Leftrightarrow a = 1$