**BAREM CLASA a VI - a**

**Subiectul I ( 5X10 puncte )**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| D | B | C | B | B | A | C | C | A | A |

 **Subiectul II (20 puncte)**

 2a + 41b + 41c + 6c = 1558  2(a +3c) + 41(b + c) = 41∙38 …………………………………………….2p

 b + c = 38 -  ( 1)  b + c < 38 ; b, c - prime  b , c . ...........................3p

 b + c N  41 | a + 3c  a + 3c { 41, 82, 123, 164…}. Dar a  29 si c  31 ......................2p

  a + 3c  29 + 3∙31 = 122  a + 3c = 41 sau a + 3c = 82 .....................................................2p

 Caz 1. a + 3c = 41  a = par sau 3c = par  a = 2, c = 13, b = 23 ( solutie) sau

 c = 2, a = 35 ( nu convine ) …………………………………………3p

 Caz 2. a + 3c = 82 , dar a < 30 3c > 52 si 3c < 82 c >17 si c < 28 c{19,23}………………..2p

 Daca c = 19 , a = 82 – 57 = 25 nu convine……………………………………………………………………………….2p

 Daca c = 23 , a = 82 – 69 = 13, din ( 1) b = 38 – 4 – 23 = 11 ( solutie)........................................2p

 Deci problema are doua solutii : ( 2, 23, 13 ) si ( 13, 11, 23 ) ...........................................................2p