**BAREM CLASA a VIII - a**

**Subiectul I ( 5X10 puncte )**

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

**Subiectul II (20 puncte)**

 a) A ≠ ∅ daca 1+ a < 1 - a ⇒ a < 0 . ..................................................................4p

 A ⊂ B daca -a -3 ≤ 1 + a ⇔ -2a ≤ 4 ⇔

 ⇔ a ≥ -2 . .............................................................................................4p

Solutie a[- 2, 0 ) .....................................................................................................2p

 b) A ∩ B nevida ⇔ 1) ∅ ≠ A ⊂ B sau .....................................................1p

 2) A ∩ B = (-a -3 , 1 – a ) ..................................................1p

In cazul 1) avem A ∩ B = A contine cel mult un nr. intreg ………………………………………2p

 1 – a – (1 + a) ≤ 1 ⇔ -2a ≤ 1 ⇔ a ≥ -1/2 ...............................................2p

 Solutie a[- 1/2, 0 ).................................................................................................1p

In cazul 2) avem 1 + a < -a – 3 < 1 – a ⇒ 2a < - 4 ⇒ a < -2...................................2p

In plus A ∩B = (-a -3 , 1 – a ) are cel mult un nr.intreg ..............................................1p

1–a - (-a - 3) ≤ 1 ⇔ 4 ≤ 1 fals . ...................................................................................1p

Deci solutia ramane a[- 1/2, 0 ). ………………………………………………………………………..1p