

First Bulgarian National Olympiad in Informatics

June 1 and 2, 1985

Second Day.

Problem 4.

Running the below given programme we get a sequence of numbers: 4, 9, 18. Which were the input data?

(FORTRAN)

```
      INTEGER X(3), A(3), S
      DO 10 I=1, 3
      X(I)=I-1
10  READ(1, 20)A(I)
20  FORMAT(I5)
      DO 40 N=1, 3
      S=0
      DO 30 I=1, 3
30  S=S*X(N)+A(I)
40  WRITE(3, 50)S
50  FORMAT(I5)
      STOP
      END
```

(BASIC)

```
  5 DIM X%(2), A%(2)
10 FOR I=0 TO 2
15 X%(I)=I
20 INPUT A%(I)
25 NEXT I
30 FOR N=0 TO 2
35 S%=0
40 FOR I=0 TO 2
45 S%=S%*X%(N)+A%(I)
50 NEXT I
55 PRINT S%
60 NEXT N
65 END
```

Source is taken from the jury materials.

Retrieved from <http://www.math.bas.bg/bcni/noi85.html>.