



ESERCIZIO 3

PROBLEMA

A sum of money is to be divided among Alice, Bob and Charlie. Alice receives \$10 plus one-third of what is left. Bob then receives \$60 plus one-third of what remains. Charlie receives the rest, which amounts to \$400. How much did Alice and Bob receive? Put your answers in the table below, as integer numbers without the \$ sign.

Alice	
Bob	

ESERCIZIO 4

PROBLEMA

Si consideri la seguente procedura PROVA1.

```
procedure PROVA1;  
variables A, B, C, K integer;  
A ← 1;  
B ← 2;  
C ← 3;  
for K = 1 to 5 do  
    A ← A+B -C;  
    B ← A - B + C;  
    C ← B + C - A;  
endfor;  
output A, B, C;  
endprocedure;
```

Determinare i valori di output per A, B, C.

A	
B	
C	

ESERCIZIO 5
PROBLEMA

Si consideri la seguente procedura PROVA2.

```

procedure PROVA2;
variables A, B, K, J integer;
input A;
K ← 5;
for J = 1 to 8 step 1 do
  input B;
  if A < B then K ← K + A; endif;
  if A > B then K ← K + B; endif;
endfor;
output K;
endprocedure;
  
```

Il valore di input per A è 10 e quelli per B sono 7, 10, 14, 8, 16, 10, 9, 12.
 Determinare il valore di output per K.

K	
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ESERCIZIO 6
PROBLEMA

Si consideri la seguente procedura PROVA3.

```

procedure PROVA3;
variables A, B, M, N, K integer;
input A;
M ← 0;
N ← 0;
for K = 1 to 8 step 1 do
  input B;
  if A < B then M ← N + 2; endif;
  if A > B then N ← M + 1; endif;
endfor;
output M, N;
endprocedure;
  
```

Il valore di input per A è 15 e quelli per B sono 8, 18, 7, 5, 10, 14, 15, 16.
 Determinare i valori di output per M ed N.

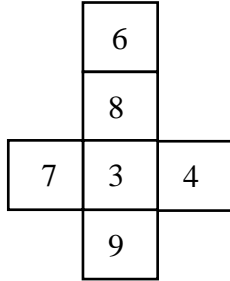
M	
N	



ESERCIZIO 7

PROBLEMA

The figure shown is folded to form a cube.



Three faces meet at each corner, obviously. If the numbers on the three faces at a corner are multiplied, what is the largest possible result? Put your answer in the box below.

ESERCIZIO 8

PROBLEMA

Harsh winters bring big snow falls. To shovel all of the snow on his driveway, Bob needs 12 hours. Individually, Dave needs 8 hours to shovel all of Bob's snow, John needs 6 hours to shovel all of Bob's snow, and Allison needs 4 hours to shovel all of Bob's snow. If Bob, Dave, John, and Allison all work together (in a coordinate way), how long does it takes them to shovel all of Bob's snow? Put your answer in hours and minutes in the frame below.

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