# Problem of the Week
# Problem D
# On a Roll

Each of the numbers 1, 2, 3, 4, 5, 6 occurs, one to a face, on the faces of a cube. Three people, Amy, Ben and Cal, are seated around a table. The cube is placed on the table so that from their different seat locations, each one can see the top and two adjacent faces. When Amy adds the three numbers that she can see, her total is 9. When Ben adds the three numbers that he can see, his total is 14. When Cal adds the three numbers that he can see, his total is 15.

Determine the number on the bottom face of the cube.

Note that the three faces that are visible on the above cube (die) add to 11. The picture is for illustration only. Do not assume anything from the above diagram.