



Problem of the Week

Problem B

Create a Magic Square

In a *magic square*, the sum of the numbers in each row, column, and diagonal is the same. This number is called the *magic sum*. In the following magic square, A , B , C , D , E , F , G , H , and J represent numbers, and clues are given to determine some of these numbers.

- The value of A is one more than the product of 3 and 4.
- The value of B is the sum of 1, 2, and 3.
- The value of C is the smallest odd number greater than 10.
- The value of F is also known as a dozen.
- The value of G is equal to the total number of sides in three triangles.

A	B	C
D	E	F
G	H	J

- Use the given clues to determine the values for A , B , C , F , and G .
- Determine the magic sum for this magic square, then use this to complete the magic square.
- Would you have been able to complete this magic square if only four clues were given, instead of five? If so, which clue(s) do you not need?