



Problem of the Week

Problem C

Odd or Even?

In a sequence of numbers, each number in the sequence is called a term. In the sequence 1, 3, 5, 7, 9, the first term is 1, the second term is 3, the third term is 5, the fourth term is 7 and the fifth term is 9.

In another sequence, the first term is 26. If a term in the sequence is even, then the next term will be half the value of that term. If a term in the sequence is odd, then the next term in the sequence is one more than three times that term. The rules are illustrated in the diagram below. By following these rules, the first three terms of this sequence are 26, 13 and 40.

Is the twenty-sixth term of the sequence odd or even? Justify your answer.

