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function findHomemadeCupcake(A[1..n], W):
    # A is the array of cupcake weights
    # W is the known weight of a normal cupcake
    return locateHomemade(A, 1, n, W)

function locateHomemade(A, low, high, W):
    if low == high:
        # If we have a single cupcake left, it must be the homemade one
        return low

    mid = (low + high) // 2
    leftSize = mid - low + 1
    expectedLeftWeight = leftSize * W

    # Get the actual weight of the left half
    actualLeftWeight = MAGICWEIGHT(A[low..mid])

    if actualLeftWeight < expectedLeftWeight:
        # The homemade cupcake is in the left half
        return locateHomemade(A, low, mid, W)
    else:
        # The homemade cupcake must be in the right half
        return locateHomemade(A, mid + 1, high, W)

```