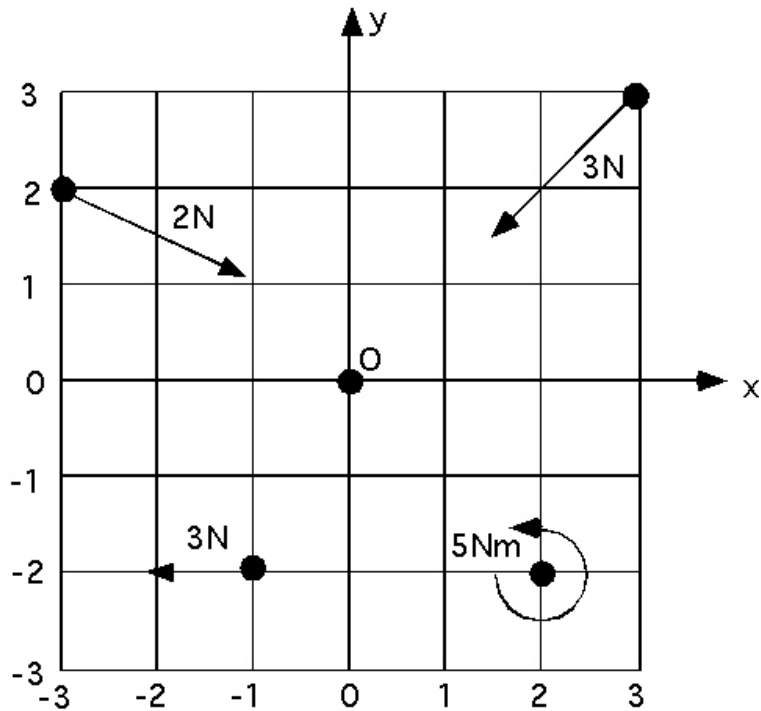**Problem M2** (Materials and Structures)

In this question you will calculate and sum forces and moments in 2-D

Consider the system of forces and couples acting in the directions indicated on the 6m x 6 m grid shown above. Calculate:

(a) The total (resultant) force acting on the grid

(b) The total moment acting about point O.

In each case express your answer as a vector.