

# PROBLEM 1

PROBLEM 1: A rectangular plate with a semi-circular cutout on the right side. The plate has a total width of 100 mm and a total height of 60 mm. The semi-circular cutout has a radius of 20 mm. The center of the cutout is located 20 mm from the right edge of the plate. The plate is subjected to a uniform distributed load of 100 N/m acting vertically downwards. The plate is supported by a pin support at the bottom left corner and a roller support at the bottom right corner. Determine the reaction forces at the supports.

