1. Solve the following inequalities. Write the answer in interval notation.

(a) \[
\frac{x + 3}{x^2 - 2x - 3} \leq 0
\]

(b) \[|2x + 4| \geq 7\]

2. (a) Find the center and the radius of the circle with equation

\[x^2 - 4x + y^2 - 2y = 4\]

(b) Sketch the region in the xy-plane

\[\{(x, y) | 4 \leq (x - 3)^2 + (y - 4)^2 \leq 9\}\]

Write the solution of each problem on a separate sheet of paper and staple them, please.