1- Find the center and the radius of the following circle: \( x^2 + y^2 - 2x + 2y + \frac{7}{4} = 0 \).

2- Find an equation of a circle that has a diameter with endpoints \((2, 3)\) and \((-4, 11)\).
3- Determine the domain of the function \( f(x) = \frac{1}{\sqrt{x+4}} \)

4) Let \( f(x) = \begin{cases} 
|x|, & \text{if } x \leq 1 \\
2, & \text{if } x > 1
\end{cases} \). Then find the following:

a) Graph \( f(x) \)

b) State the domain

c) Insert solid circle or hollow circle where necessary to indicate the true nature of the function.

5) Does the set \{ (5, 10), (3, -2), (4, 7), (5, 8) \} of the ordered pairs \((x, y)\) define \( y \) as a function of \( x \).