

King Fahd University of Petroleum and Minerals
Math 001
Quiz (2.1,2.2)

Name: _____, ID#: _____,
Sec#: _____

1-Find the center and the radius of the following circle: $x^2 + y^2 - x + \frac{2}{3}y + \frac{1}{3} = 0$.

2-Find an equation of a circle that has a diameter with endpoints (7, -2) and (-3, 5)

3-Determine the domain of the function $f(x) = \frac{1}{\sqrt{5-x}}$

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 $\{(2, 3), (5, 1), (-4, 3), (7, 11)\}$ of the ordered pairs (x, y) define y as a function of x .