# King Fahd University of Petroleum and Minerals <br> Prep-Year Math Program <br> Math 001—Term 061 <br> Recitation (1.5\&2.1) 

## Question1:

Find the solution set in interval notation of the of the following inequality
a) $\frac{3}{x+1}>x-1$
b) $|2-2 x|-1>4$

## Question2:

Find the set of all values of $k$ for which the equation has two real solutions:

$$
x^{2}+k x+2 k=0
$$

## Question3:

Decide whether or not each equation has a circle as its graph.
a) $x^{2}-6 x+y^{2}+10 y+25=0$
b) $x^{2}+10 x+y^{2}-4 y+33=0$

## Question4:

Find the equation of a circle with center $(-2,3)$ that has a diameter with one end point $(1,0)$

