NAME (Print!): _____

Check one: (1pm): _____
(2pm): _____

Quiz 1

Problem 1, 3 points: Express the set

$$\left\{x : \frac{x}{x+1} < 0\right\}$$

as an interval. Show all you work.

Problem 2, 4 points: For which values of c does $x^2 + cx + 1$ have a double root? No real roots? Show your work.

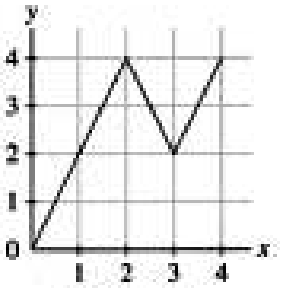

FIGURE 27

Problem 3, 3 Points: The pictured graph is of $y = f(x)$. On coördinate axes you draw yourself, graph the following (show your work or at least your thought process):

(a) $f\left(\frac{1}{2}x\right)$

(b) $-f(-x)$

(c) $f(x+2)$