Student ID _____

Quiz#2 Semester 1/2017: Answer the question in the area provided.

Consider a simple macroeconomics model given below

$C = C_0 + 0.3Y - k_1 r;$ $\quad k_1 > 0.$

$I = I_0 + 0.2Y - k_2 r;$ $\quad k_2 > 0.$

where $Y = GDP,\ C = consumption,\ I = investment,\ r = interest\ rate.$

1.1) (2 points) Can we solve the model? If not, what additional equation do we need to make the model complete? Shortly explain your answer.

1.2) (3 points) Write the above simple macroeconomics model in terms of matrix representation.

1.3) (5 points) State the condition under which solution is unique.

1.4) (10 points) Solve for the equilibrium solution of "C*" using the Cramer's rule.