

KANSAS STATE UNIVERSITY

Intermediate Microeconomics (Economics 520)

Professor D. Weisman
Spring 2000

Take-Home Essay Question 1

Instructions: This is the take-home essay question for your first examination in this class and is worth 25 points. This essay is to be turned in (without exception) on the last class meeting prior to the first midterm examination. The essay must be typed, either double-spaced or one and one-half spaced, and use a font size no smaller than 12 pt. While there is no definitive page constraint, you are encouraged to practice economy of presentation. You need not type any graphical analysis used in support of your answer, but such graphs should be constructed with precision. Your name and student number should appear in the upper right-hand corner of your essay. You are encouraged to work with your classmates in developing the ideas necessary to answer this question, but the write-up itself should be your own work. These instructions should be followed precisely.

The City Commission in Manhattan is giving consideration to implementing price ceilings on rental units based on the number of bedrooms in the unit. The demand function for rental units (on a single bedroom equivalent basis) is given by $Q^D = 80 - 4P + 2q$ and the supply function is given by $Q^S = 2P$, where P is price, Q is quantity and q is an index of housing quality. The Commission is giving consideration to imposing a ceiling price on rental units of $P^{\max} = 16$.

- a) Let $q = 20$ both before and after the imposition of the ceiling price. Are consumers of rental housing in Manhattan well served by this policy? Provide a careful economic analysis in support of your claim.
- b) Suppose that the Commission is concerned that landlords will allow the quality of their rental units to deteriorate following the imposition of the ceiling price. Continue to assume that $q = 20$ prior to the imposition of the ceiling price. Determine the values of q that must prevail following the imposition of the ceiling price in order for consumers to be no worse-off from this policy? Provide a careful economic analysis in support of your claim.
- c) What position would the Manhattan Association of Home Realtors (MAHR) likely take on the issue of ceiling prices for rental units? Why? [In answering this question, you should ignore all supply-side considerations. In other words, just assume that supply adjusts fully to accommodate demand.]