Wilf Csaplar Jr.   Economics 280   Homework #5   Due **Friday** 03/28

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (30 points) Draw an isoquant/iso-cost diagram for when the wage rate is twice the rental rate. Explain how you know w = 2r. Illustrate an increase in the rental rate. Explain why the curve(s) moved as drawn. Given your diagram, are capital and labor substitutes or complements? Explain your logic.

2) (30 points) Draw an isoquant/iso-cost diagram for when the wage rate is $4/L the rental rate is $6/L. Find the iso-cost line for TC = $300. Illustrate an increase in the wage rate to $5/L. Explain why the curve(s) moved as drawn. Given your diagram, are capital and labor substitutes or complements? Explain your logic.

3) (30 points) Draw an isoquant/iso-cost diagram for when the wage rate is ½ of the rental rate. Explain how you know w = ½r. Draw a total of three iso-cost lines to find the expansion path. Given your diagram, do the first two points show IRTS, CRTS, or DRTS? How can you tell? What about the second and third points, do they show IRTS, CRTS, or DRTS? How can you tell?

4) (10 points) What is the slope of the iso-cost line? How do you know your answer is correct?