Problem Set 10

Overview: In this problem set you will examine TANF type assistance programs using budget line and indifference curve analysis. This TANF type program has the following characteristics.

$400 = \text{Max TANF/month}$

$0 = \text{Min TANF/month}$

$800 = \text{Disposable Income/month (TANF + Earnings) at which TANF starts being taken away}$

Take-away rate = 50%

Work requirement: People must work at least 40 hours per month to receive TANF

$320/\text{month} = \text{Max leisure hours available}$

Step 1 (Graph 1):

a. On a sheet of graph paper or a spreadsheet printout, neatly and accurately draw budget lines showing 1) gross income and 2) disposable income for someone, given the above TANF program, and a wage of $6/hr. Label your curves, axes, and major points. Label this graph; “Graph 1”.

b. In Blue, draw a set of indifference curves for a person, Bob, who decides to work at a level in which he receives TANF. Label these curves $U^\text{Bob}_1$, $U^\text{Bob}_2$, etc.

c. In Red, draw a set of indifference curves for a person, Chuck, who decides to work at a level in which he receives no TANF. Label these curves $U^\text{Chuck}_1$, $U^\text{Chuck}_2$, etc.

Note: This will be scored as follows: \text{Score} = 6.75 \times \text{Raw} \times \text{Graph} \times \text{Color} \times \text{Neat}

Where: \text{Raw} = \text{How accurately your graph reflects the correct budget line. Raw can run from 0 (very sucky) to 1 (perfect).}

\text{Graph} = \text{Whether or not you used graph paper or a spreadsheet printout. Graph = 0 if you did not and 1 if you did. Graph will equal either 1 or 0; nothing in between.}

\text{Color} = \text{Whether or not you used the colors as instructed Color = 0 if you did not and 1 if you did. Color will equal either 1 or 0; nothing in between.}

\text{Neat} = \text{How neat and accurate your graph is. Neat can run from 0 (very sucky) to 1 (beautiful and precise).}
Step 2 (Graph 2):

a. On a sheet of graph paper or a spreadsheet printout, neatly and accurately draw budget lines showing 1) gross income and 2) disposable income for someone, given the above TANF program, and a **wage of $12/hr**. Label your curves, axes, and major points. Label this graph; “Graph 2”.

b. In Blue, draw a set of indifference curves for a person, Bill, who decides to work at a level in which he receives TANF. Label these curves $U_1^{Bill}$, $U_2^{Bill}$, etc.

c. In Red, draw a set of indifference curves for a person, Celia, who decides to work at a level in which he receives no TANF. Label these curves $U_1^{Celia}$, $U_2^{Celia}$, etc.

**Note:** This will be scored as follows: Score = 6.75 × Raw × Graph × Color × Neat

Where: Raw, Graph, Color, and Neat are defined the same as in Step 1.

Step 3 (Graph 3):

a. On a sheet of graph paper or a spreadsheet printout, neatly and accurately draw budget lines showing 1) gross income and 2) disposable income for someone, given the above TANF program, and a **wage of $24/hr**. Label your curves, axes, and major points. Label this graph; “Graph 2”.

b. In Blue, draw a set of indifference curves for a person, Brent, who decides to work at a level in which he receives TANF. Label these curves $U_1^{Brent}$, $U_2^{Brent}$, etc.

c. In Red, draw a set of indifference curves for a person, Cristik, who decides to work at a level in which he receives no TANF. Label these curves $U_1^{Cristi}$, $U_2^{Cristi}$, etc.

**Note:** This will be scored as follows: Score = 6.75 × Raw × Graph × Color × Neat

Where: Raw, Graph, Color, and Neat are defined the same as in Steps 1 and 2.