

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 = Max TANF/month

\$0 = Min TANF/month

\$800 = 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/month = 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_1^{Bob} , U_2^{Bob} , 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_1^{Chuck} , U_2^{Chuck} , etc.

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

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

Graph = 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.

Color = 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.

Neat = 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.