

**CONSUMER SURPLUS**

Problem #1

Katie is a young lady who only cares about clothes and make-up. Her utility function may be represented by  $U = \text{cosmetics}^{0.4} * \text{clothes}^{0.6}$ . She earns 3500 *zloty* a month, while the average prices of each of these goods oscillate around 20 *zloty*. Her boss wants to move her to another town where  $P_{\text{cosmetics}} = 20$  *zloty* and  $P_{\text{clothes}} = 40$  *zloty*. However, he is not planning to change her wage. Katie knows some microeconomics (compensatory and equivalent changes). She believes that moving to another city is just as bad as cutting her wage by  $A$  *zloty*. On the other hand, she would not mind being transferred if her wage increased by  $B$  *zloty*. Find  $A$  and  $B$ .