

The formula used to calculate the coefficient cross elasticity of demand is

$$E_{A,B} = \frac{\% \text{ change in quantity demanded of product A}}{\% \text{ change in price of product B}}$$

The formula used to calculate the coefficient cross elasticity of demand is similar, but we should use the price and quantity for only one good.

So, using the formulas we have such equities:

$$-2 = \text{change in quantity of clothes}/5\%$$

$$-0.5 = \text{change in quantity of shoes}/5\%$$

$$\text{Change in quantity of clothes} = -10\%$$

$$\text{Change in quantity of shoes} = -2.5\%$$

The total change in the revenue will be calculated as:

$$\text{Change in TR} = (1.05 \cdot 0.9 - 1) + (1 \cdot 0.975 - 1) = (0.945 - 1) + (0.975 - 1) = -0.08 = -8\%$$