Quiz 1

1. Consider an economy where the rich earns 5 times more than the poor:

$$Y=\left\{Y\_{1},Y\_{2}\right\}=\left\{1,5\right\}.$$

Calculate the Gini coefficient in this economy?

1. Consider an economy where half of the population earns 1 unit of income and the other half earns $α$ unit of income:

$$Y=\left\{Y\_{1},Y\_{2}\right\}=\left\{1,α\right\}.$$

If the Gini coefficient is 0.4 in this economy, then what is the value of $α$?

1. Suppose that $Y=\left\{Y\_{1},Y\_{2},Y\_{3}\right\}=\left\{1,4,20\right\}.$ Draw the Lorentz curve.