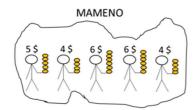


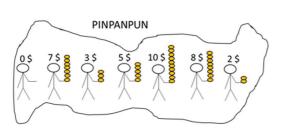
This image shows the average income (GDP per capita) of the countries in 2012. We can see that, for example, Spain and Russia have a similar average income. However, only with the average income, can we have an idea of the wealth of the inhabitants?

Below you can see 4 imaginary countries. Although the average income is the same in all of them, it is easy to see that they differ on how inequality strongly affects the wealth of their inhabitants. How can we measure inequality?

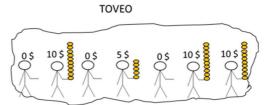
Try to design a mathematical index that would help us to measure and compare inequality in these 4 countries. You can give multiple answers. There is no one unique valid solution!



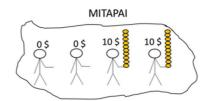
Average Income: (5+4+6+6+5)/5=5



Average Income: (0 + 7 + 3 + 5 + 10 + 8 + 2) / 7 = 5



Average Income: (0 + 10 + 0 + 5 + 0 + 10 + 10) / 7 = 5



Average Income: (0 + 0 + 10 + 10) / 4 = 5