

Ask Frau Dulent (Fragen Sie Frau Dulent):

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● Math – Frau Dulent speaks of Percent Calculation

And I quote **New Atlas** of newatlas.com :

“Researchers at Aalto University have developed a photovoltaic device that has an external quantum efficiency of 132 percent. This impossible-sounding feat was achieved using nanostructured black silicon, and could represent a major breakthrough for solar cells and other photodetectors.

If a hypothetical photovoltaic device has an external quantum efficiency of 100 percent, that means that every photon of light that strikes it generates one electron, which exits through the circuit and is harvested as electricity.

This new device is the first to not only reach 100-percent efficiency, but exceed it. At 132 percent, that means you get on average 1.32 electrons for every photon. It was made using [black silicon](#) as the active material, with nanostructures shaped like cones and columns, absorbing UV light.”

Not just record breaking efficiency, but math breaking stupidity! There can only be 100% of anything. Anything else is *.* times more. By definition:

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100} \text{ or } \frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

Percentage formula

132% is wrong and should be written correctly as: **1.32 x**