How Much Sand

Have you ever wondered how much sand is in the Sahara desert?
A LOT!
Math can help us to determine the real amount of sand in the Sahara desert rather acurately.

The total area of the Sahara desert is 9,200,000 square kilometres.
The radius of one sand grain is approximately 50 micrometers.

There are 1000 meters in 1 kilometre.
There are 1,000,000 micrometers in 1 meter
The area of a sand grain (if treated as a perfect circle) is $A = \pi r^2$

How many sand grains are there in the Sahara desert if only 20% of its area is covered in sand?

232,911,392,405 sand grains