# Re: Problems finding out the area of a 0.5mm circle.

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- *From*: Michael Varney <varney@xxxxxxxxxxxx>
- *Date*: Tue, 31 Jan 2006 21:02:47 −0700


johnpeterson02@xxxxxxxxxxx wrote:

> Problems finding out the area of a 0.5mm circle.
>
> After doing the following equation 3.14 x 0.25 x 0.25, I get an area of 0.1963mm and I need the answer to be in nanometers thus I convert it, with the result being 196300 nano meters
>
> However when I try working out the same area (0.5 circle) using nano meters in the initial equation instead of mm (3.14 x 250,000 x 250,000) I get a bigger area of 196250000000 nano meters, which converts to 196300mm!

Do you know how units work, and exponential notation?

> Why is the area of a 0.5mm circle bigger when I work out the area in nanometers rather than mm?
>
> I also need to know how many 100 nano meter circles I can fit into a 500,000 nanometer (0.5mm) circle, and I assume I simply divide 196250000000 by 100?
>
> Thanks for your help

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