



**PHYSICS 132**

**Homework # 2**   **2nd. Semester 2015-16**

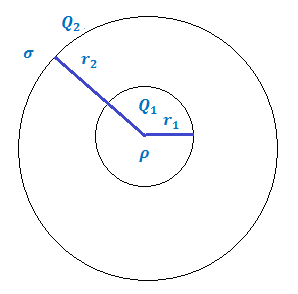
**Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Student #: -----------------------***

***Section:-----------***

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A solid sphere 10cm in radius carries 50µC charge distributed uniformly throughout its volume. It is surrounded by a concentric spherical shell of radius 20cm, uniformly charged with 40µC.

1. Find the volume charge density of the solid sphere?
2. Find the surface charge density of the spherical shell?



1. Find the electric field at :

Using Gauss law

1. 5.0 cm from the center.

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1. 15 cm from the center.

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1. 30 cm from the center.

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