Assignment 5

The due date for submitting this assignment has passed.

Please do not submit your work on this assignment.

Due on: 2021-05-24, 23:59:00

A. Math Review

B. Course Outline

C. Course Notes

D. Course Projects

E. Course Exams

F. Course Resources

G. Course Policies

H. Course Announcements

I. Course Discussions

J. Course Materials

K. Course Activities

L. Course Assignments

M. Course Grades

N. Course Resources

O. Course Policies

P. Course Announcements

Q. Course Discussions

R. Course Materials

S. Course Activities

T. Course Assignments

U. Course Grades

V. Course Resources

W. Course Policies

X. Course Announcements

Y. Course Discussions

Z. Course Materials

1. Sketch the boundary surface with equipotential lines and equipotential contour lines.

2. Consider a rectangular region of width 2a and height 2b.

3. In the CGS system, the field is given by the formula for the electric field.

4. Sketch the equipotential lines and equipotential contour lines for the given region.

5. Write a short explanation of the mathematical concepts and how they relate to the practical applications of electric fields.

6. Evaluate the electric field at a point inside the region for the given field.

7. Calculate the total electric flux through the boundary surface.

8. Determine the electric potential at a point inside the region for the given field.

9. In the following assignment, the best sensor model is the one that has a...