Class Pace – Equations

How is the pace at which I go through equations in the power point documents?

1. Too Fast
2. Too Slow
3. Okay
Class Pace – Concepts

How is the pace at which I go through concepts during a presentation?

1. Too Fast
2. Too Slow
3. Okay
Class Pace – PRS

Do I spend enough time discussing the correct answers to the PRS questions?

1. Not enough time
2. Too much time
3. Okay
Class Pace – Table Problems

Do you have enough time to do the table based in class problems?

1. Not enough time
2. Too much time
3. Okay
Preparation

Do you read before coming to class?

1. Yes, summary & reading
2. Yes, summary only
3. I scan the summary
4. No, not at all
Note Taking

Do you take notes in class?

1. Yes, on lecture print outs
2. Yes, in “traditional” way
3. No
The graph above shows a potential V as a function of x. The *magnitude* of the electric field for $x > 0$ is

1. larger than that for $x < 0$
2. smaller than that for $x < 0$
3. equal to that for $x < 0$
4. I don’t know
The graph above shows a potential V as a function of x. Which is true?

1. $E_{x > 0}$ is $> 0$ and $E_{x < 0}$ is $> 0$
2. $E_{x > 0}$ is $> 0$ and $E_{x < 0}$ is $< 0$
3. $E_{x > 0}$ is $< 0$ and $E_{x < 0}$ is $< 0$
4. $E_{x > 0}$ is $< 0$ and $E_{x < 0}$ is $> 0$
5. I don’t know
Flux Direction

The flux through the planar surface below (positive unit normal to left)

1. is positive.
2. is negative.
3. is zero.
4. I don’t know
Flux Through Sphere

The total flux through the above spherical surface is

1. positive.
2. negative.
3. zero.
4. I don’t know
Should We Use Gauss’ Law?

For which of the following uniform charge distributions can we use Gauss’ Law to determine the electric field?

A. Concentric nested spherical shells
B. Non-concentric nested spherical shells
C. Finite line of charge
D. Infinite line of charge
E. Thin, infinite, sheet of charge
F. Thick, infinite, slab of charge

1. None of them 2. All of them
3. A, B, C only 4. D, E, F only
5. A, D, E, F only 6. C, D only
7. A, D, E only 8. C, D, E, F only
Spherical Shell

We just saw that in a solid sphere of charge the electric field grows linearly with distance. Inside the charged spherical shell at left \((r<a)\) what does the electric field do?

1. Constant and Zero
2. Constant but Non-Zero
3. Still grows linearly
4. Some other functional form (use Gauss’ Law to determine)
5. Can’t determine with Gauss Law
E Field from Slab

A positively charged, semi-infinite flat slab has thickness D.

The z-axis is perpendicular to the sheet, with center at $z = 0$.

At the plane’s center ($z = 0$), $\mathbf{E}$
1. points in the positive $z$-direction
2. points in the negative $z$-direction
3. is zero
4. I don’t know
E Field from Slab

A positively charged, semi-infinite flat slab has thickness D. The z-axis is perpendicular to the sheet, with at \( z = 0 \).

A distance \( z \) from its central plane,

1. \( E \) is constant
2. \( E \propto \frac{1}{z^2} \)
3. \( E \propto \frac{1}{z} \)
4. \( E \propto z \)
5. I don't know