Concept Question: E from V

Consider the point charges you looked at earlier:



$$V(P) = -kQ/a$$

You calculated V(P). From that can you derive E(P)?

- 1. Yes, its kQ/a² (up)
- 2. Yes, its kQ/a² (down)
- 3. Yes in theory, but I don't know how to take a gradient
- 4. No, you can't get E(P) from V(P)
- 5. I don't know

Concept Question: E from V



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

Concept Question: E from V



The above shows potential V(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

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