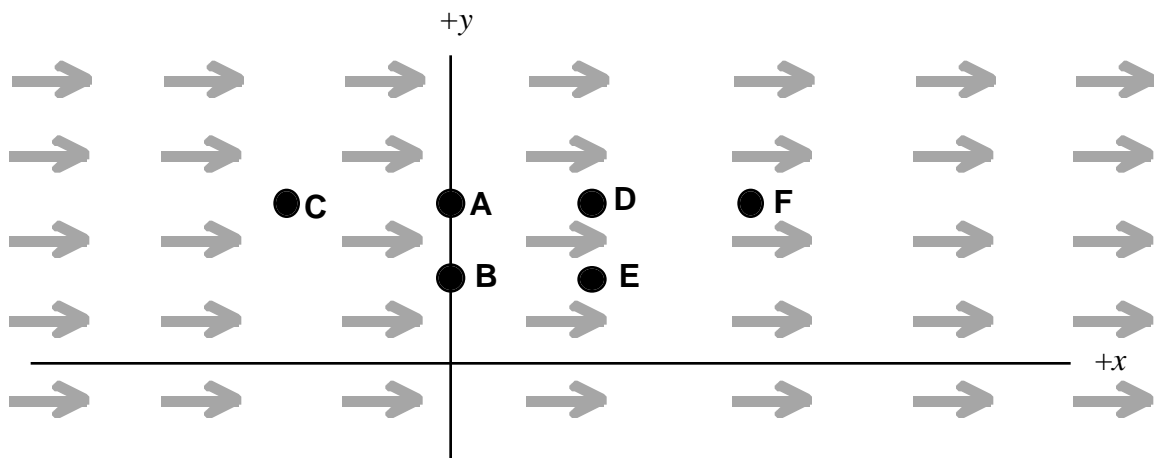


## Uniform Electric Field—Electric Potential at Different Points II <sup>153</sup>

We have a large region of space that has a uniform electric field in the  $+x$  direction ( $\Rightarrow$ ) as indicated by the arrows in the diagram below. At the point  $(0,0)$  m, the electric field is  $30 \text{ i N/C}$  and the electric potential is 100 volts.

Rank the electric potential from greatest to least at the following points within this region.

**A:**  $(0, 6) \text{ m}$     **B:**  $(0, 3) \text{ m}$     **C:**  $(-3, 6) \text{ m}$     **D:**  $(3, 6) \text{ m}$     **E:**  $(3, 3) \text{ m}$     **F:**  $(6, 6) \text{ m}$



Greatest   1\_\_\_\_\_   2\_\_\_\_\_   3\_\_\_\_\_   4\_\_\_\_\_   5\_\_\_\_\_   6\_\_\_\_\_   Least

Or, all the points have the same electric potential. \_\_\_\_\_

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed

Sure

Very Sure

1      2      3      4      5      6      7      8      9      10

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<sup>153</sup> C. Hieggelke