Keystone - Chapter 16: Electric Potential

The equipotential plot below shows several equipotential lines each labeled by its potential in volts. The distance between lines of the square grid represents 1.00 cm.

- (a) Is the magnitude of the electric field bigger at A or B?
- (b) Starting at point B, draw a path such that $\Delta V = +4$ V.
- (c) Starting at point A, draw a path such that $\Delta V = 0$ V.
- (d) What is the electric field at point B?

(e) Draw the representation of the electric field at each X below. Make sure the length of each electric field arrow represents the relative magnitude of the electric field at that point.



Figure 1: Equipotential Plot

Portions of this problem comes from Serway & Beichner (2000). Principles of Physics, 5th ed. p.801