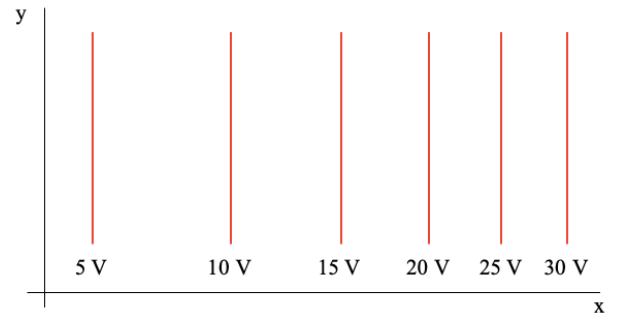


**Off-the-Wall question 3:** Consider the equipotential lines shown in the sketch.



a.) Discuss the electric field in the y-direction.  
Justify your response.

b.) Discuss the electric field in the x-direction.  
Justify your response.

c.) In what direction is the net electric field? Justify.

d.) An proton moving to the right passes the 15 volt equipotential line moving with known velocity  $v$ . Explain how you might use the graph to determine where the charge stops?

e.) There is a point to the left of the origin at which the electric potential is -15 volts. Explain why this is a perfectly reasonable possibility.