When a positive test charge is released from rest near a (fixed) positive source charge, what happens to the electric potential of the positive test charge?

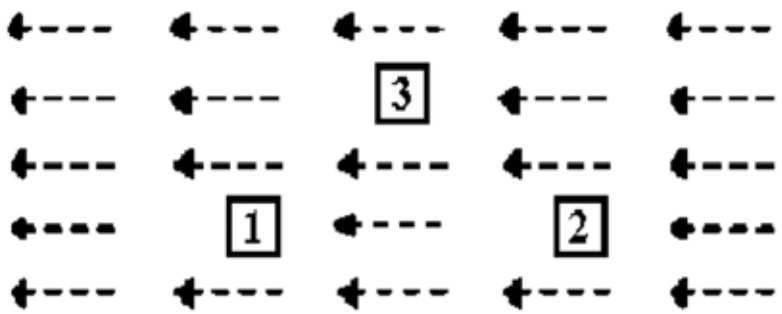
1. It will increase because the charge will move in the direction of the electric field.
2. It will decrease because the charge will move in the direction opposite to the electric field.
3. It will decrease because the charge will move in the direction of the electric field.
4. It will remain constant because the electric field is uniform.
5. It will remain constant because the charge remains at rest.

When a negative test charge is released from rest near a (fixed) positive source charge, what happens to the electric potential of the negative test charge?

1. It will increase because the charge will move in the direction of the electric field.
2. It will decrease because the charge will move in the direction opposite to the electric field.
3. It will decrease because the charge will move in the direction of the electric field.
4. It will increase because the charge will move in the direction opposite to the electric field.
5. It will remain constant because the charge remains at rest.

A positive charge might be placed at one of three spots in a region where there is a uniform electric field. How do the electric potential, $V$, on the charge at positions 1, 2, and 3 compare?

1. $V$ is greatest at 1
2. $V$ is greatest at 2
3. $V$ is greatest at 3
4. $V$ is 0 at all 3 spots
5. $V$ is = at all 3 spots but not = 0.



Two sheets of charge are separated by a distance d , small compared to the size of the sheets. The charge per unit area on the sheets are $+\sigma$ and $-\sigma$.

Select one graph below that could describe the electrostatic potential.