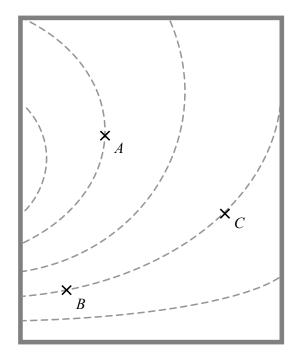
The diagram shown below right depicts a region of space. The dashed curves indicate positions of *equal* potential energy for a test charge  $+q_{\text{test}}$  that is placed at various locations within this region. Three such locations (A, B, and C) are labeled.

It is known that the potential energy at location A is *greater than* that at locations B and C.

A. At each location, draw an arrow to indicate the direction in which the test charge  $+q_{\text{test}}$  would move when released from rest at that location. Explain your reasoning.



B. Rank the locations *A*, *B*, and *C* according to the magnitude of the force that would be exerted on the test charge  $+q_{\text{test}}$  at those locations, from greatest to smallest. Explain your reasoning.