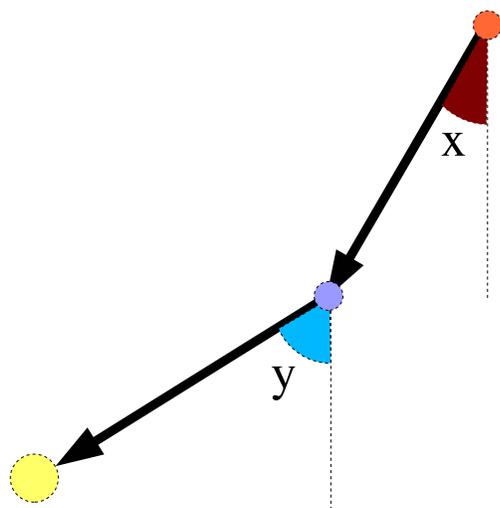A configuration of the double pendulum is defined by the two angles x, y. The potential energy of a configuration is

$$f(x, y) = -\cos(x) - \cos(y) \ .$$

At the critical points of this function, the pendulum is at rest. Find them and classify them (minimum, maximum or saddle point).

Critical point:	$D = f_{xx}f_{yy} - f_{xy}^2$	f_{xx}	nature
$(x, y) =$	$D =$	$f_{xx} =$	
$(x, y) =$	$D =$	$f_{xx} =$	
$(x, y) =$	$D =$	$f_{xx} =$	
$(x, y) =$	$D =$	$f_{xx} =$	