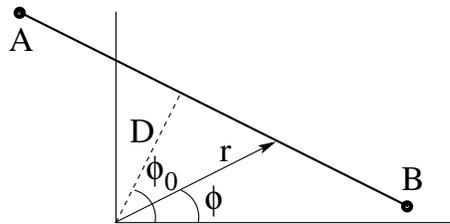


[mex117] Shortest path between two points in a plane II

Use the calculus of variation to prove that the shortest path between two points A and B in the (x, y) -plane is a straight line: $r = D/\cos(\phi - \phi_0)$. Perform the entire calculation using polar coordinates.



Solution: