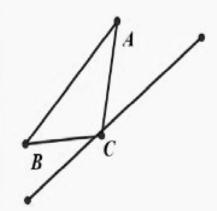
## Doing Mathematics by Staring

Email your solution to Ayman Badawi abadawi@aus.edu

100AED AWARD

Imagine that you found yourself in a desert. You saw a line in sand and two holes A, B. (See Picture) You only have a very long piece of wood (Let say unmarked ruler). Using the unmarked ruler, you were able to find a point C on the line and you constructed the triangle ACB with minimum perimeter, i.e., if you choose a different point on the line, say d, then the perimeter of ADB >= the perimeter of ACB.



How did you do that? state clearly the steps that you used in construction of such triangle.

Assume that you can draw line-segments or perpendicular line-segments just by using your finger and the unmarked ruler.