

Doing Mathematics by Staring

100AED AWARD

Email your solution to
Ayman Badawi
abadawi@aus.edu

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 \geq 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.

