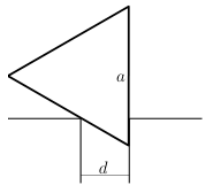
1. PRISM (8 points)

i) *(4 points)* A right prism that has an equilateral triangular base with length a is placed in a horizontal slit between two tables, so that one of the side faces is vertical. How small can the width d of the slit be made before the prism falls out of the slit? There is no friction between the prism and the tables and the prism is made of a homogeneous material. The edges of the slit are parallel.

ii) *(4 points)* Now the prism is placed in the slit so that one of its side faces is horizontal. How small can the width l of the slit be made before that position becomes unstable?

i)



ii)

