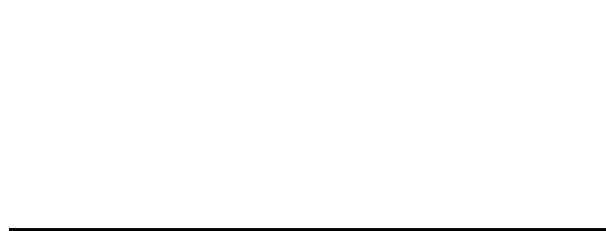


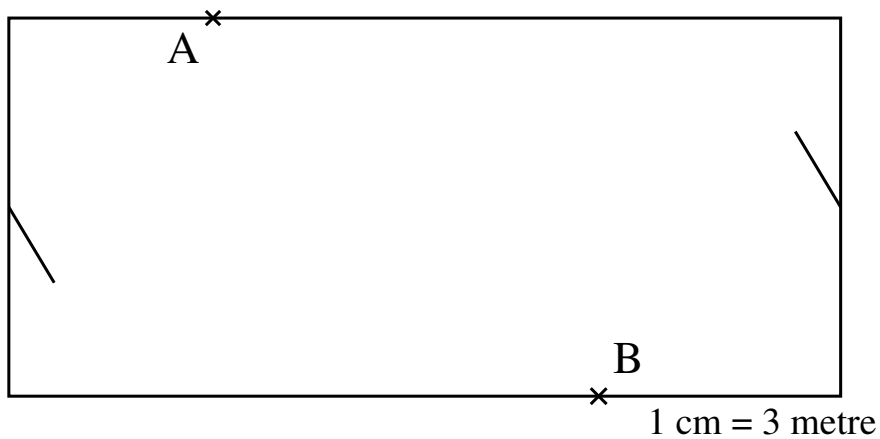
Loci



- i. Draw the locus of all points 1cm from the shape below.



- ii. Below is a diagram of a living room. There is a front door at the left hand side of the room and a patio door on the right side. There are two burglar alarm sensors, one at point A and one at point B. The range of each sensor is 9m. When the alarm is switched on, is it possible to walk from the front door to the patio door without setting off the alarm?



- iii. The diagram below shows two lighthouse on a coastline. A boat is with 12 miles of lighthouse A and within 8 miles of lighthouse B. Find the possible area in which the boat could be a label it R.

