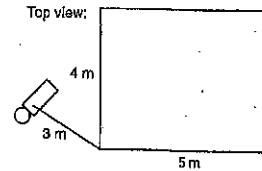


Gary the Goat

The Jacobsens keep their goat, Gary, on chain that is 3 meters long.

- 1) If they chain Gary to a metal hook in the center of their yard, what is the area of the grass that the goat can reach to eat? Sketch a picture and show your work.

- 2) Sometimes the Jacobsens chain Gary to the corner of a shed that is 5 meters by 4 meters. The chain is attached to the base of the wall at ground level. What is the area of grass that the goat can reach. Show and explain your work.



- 3)** Suppose Gary was chained at ground level to the center of the 4-meter shed wall. Would the amount of grass the goat can reach be greater than what he could reach when chained to the corner of the shed? Justify your answer.