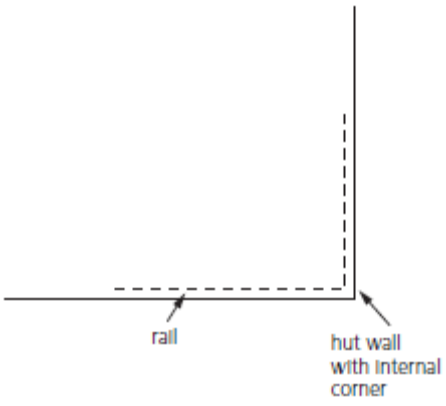

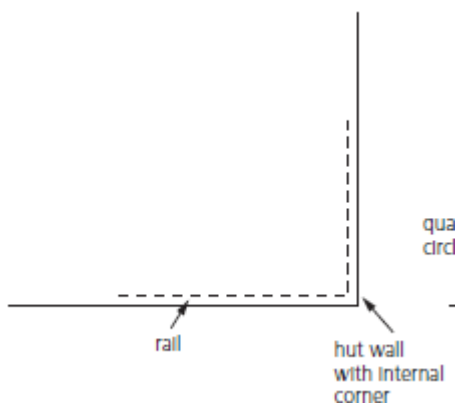
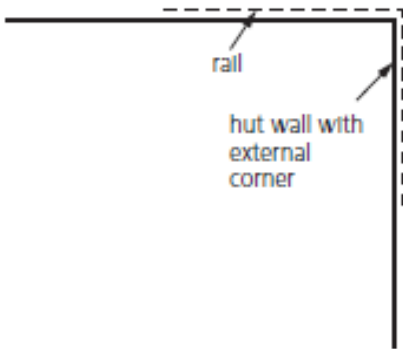
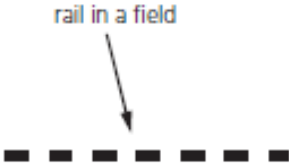


Gantug's goats

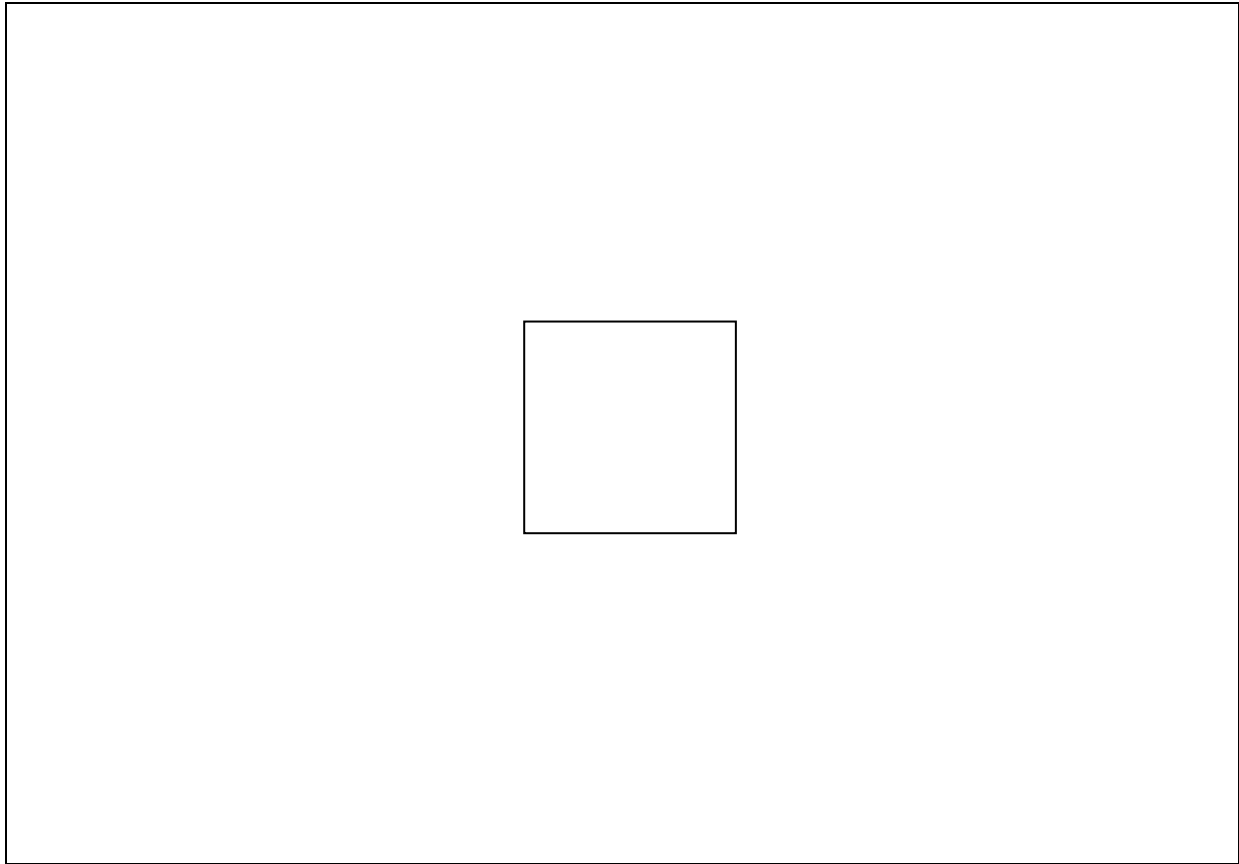
For each of these situations, draw the shape that you think Fred the goat would make in the grass if he was tied to a rail with a rope.

Situation	Drawing
The rail goes around a circular hut	 <p>The diagram shows a horizontal line representing a rail. It is solid before it reaches a vertical line representing a wall. At the corner where the rail meets the wall, the rail continues as a dashed line. The wall is labeled 'hut wall with internal corner'.</p>
The rail is on one side of a straight wall	 <p>The diagram shows a horizontal line representing a straight wall. A dashed line, representing the rail, runs parallel to the wall on one side.</p>
The rail goes around the outside corner of two walls joined at right angles	 <p>The diagram shows a horizontal line representing a rail. It is solid before it reaches a vertical line representing a wall. At the corner where the rail meets the wall, the rail continues as a dashed line. The wall is labeled 'hut wall with internal corner'. A dashed line extends from the corner of the wall, labeled 'qua circ'.</p>

<p>The rail goes around the inside corner of two walls joined at right angles</p>	 <p>The diagram shows a horizontal solid line on the left, a vertical solid line on the right, and a dashed line forming a 90-degree corner between them. A label 'rail' with an arrow points to the dashed line segment. Another label 'hut wall with external corner' with an arrow points to the vertical solid line segment.</p>
<p>The rail stands on its own in a field</p>	 <p>The diagram shows a horizontal dashed line consisting of several short segments. A label 'rail in a field' with an arrow points to the middle of this dashed line.</p>

Freda the nanny goat is on a long rope, tied to a stake near the square hut.

In this diagram the rope is 2 cm long. Find a point 2 cm from the hut to put the stake, then draw the space around the stake that Freda can reach.



Now Freda is on a longer rope that is 3 cm long in the diagram.

Using a different colour pencil, draw the space around the stake that Freda can reach.

What happens when the rope goes past the corner of the hut? How does the shape change?

Now Freda is on an even longer rope that is 4 cm long in the diagram.

Using a different colour pencil, draw the space around the stake that Freda can reach.

What happens when the rope goes past the corner of the hut? How does the shape change?
