## Loci GREEN

John wants to plant an apple tree in his garden. It has to be within 2 metres from his other apple tree at A. Show the region where John can plant the apple tree. Use the scale $1 \mathrm{~cm}: 1 \mathrm{~m}$.

- Apple tree

Robert's house is equidistant from his school and the skate park. Show on the map where Robert's house could be.


Katie rolls a ball from the corner of the room, $C$. She wants the ball to remain equidistant from the two walls. Show the direction she must roll the ball.

$C$

A guard is patrolling an exhibit in a museum. In order to protect the exhibit, he must stay 2 metres away at all times. Show the area the guard must patrol. Use the scale $1 \mathrm{~cm}: 1 \mathrm{~m}$.


My pet dog is tied to my shed on a rope that stretches 10 metres. Show the area that the dog can reach. Use the scale shown on the diagram.

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Shed |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $D$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

A farmer wants to put a sprinkler in his field (shown below). It has to be connected to the pipe that runs equidistant from the hedges across the field. The sprinkler must be exactly halfway along the pipe. The sprinkler can water the field in a radius of 40 metres. Show the area of the field the farmer can water. Use the scale shown on the diagram.

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

