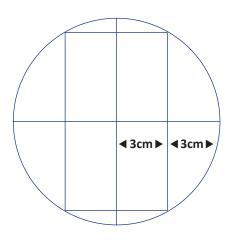
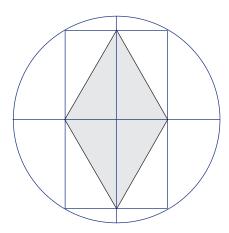
## **Rings and diamonds**

The *High Peak Jewellery Company* wants a new logo. Martin has come up with one based on a ring and a diamond. It is constructed by inscribing a **rectangle in a circle** as shown below.



The **diamond** is then drawn inside the rectangle.



Can Martin construct the shape using only ruler and compasses?

What is the area of the diamond shape?