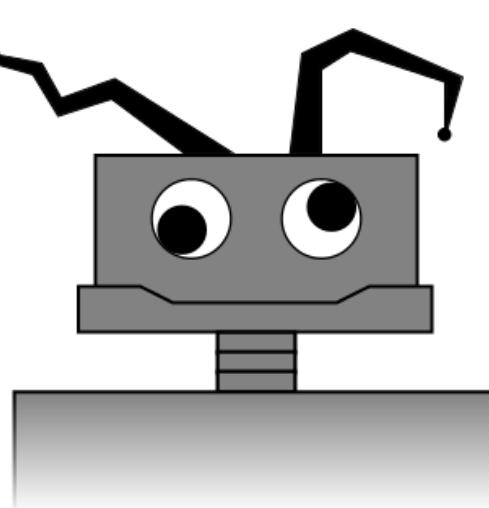




**nrich**  
Specialists in rich mathematics



# Mad Robot

## SUB JOURNEY

**DISTANCE = 1000**

**WHILE (DISTANCE > 0.001)**

**MOVE DISTANCE**

**STOP**

**ROTATE (90, DEGREES, COUNTERCLOCKWISE)**

**DISTANCE = DISTANCE / 2**

**END WHILE**

**EXplode**

**END SUB**

**A mad robot sets off towards the North East on a journey from the origin. It travels in stages by moving forward and then rotating on the spot.**

**It follows the pseudo-code on the left.**

**Where does the robot explode?**

Thousands more problems can be found on the NRICH maths website:

**<http://nrich.maths.org>**