

# Starting with Stamps

You need: square tiles or grid paper, a calculator (optional)

## ACTIVITY ONE

Frank works in a bookshop. He likes to make his job more interesting by selling stamps in square blocks if he can.

- Here are two ways that Frank could give customers a square block from a three by three page of stamps:



How many ways are there altogether?

- If Frank started with a four by four page of stamps, how many different ways could he tear square blocks off?

## ACTIVITY TWO

Tania is doing shuttle running to prepare for the athletics season.

She has set out markers that are 1 metre, 3 metres, 5 metres, 7 metres, and 9 metres from her starting line.

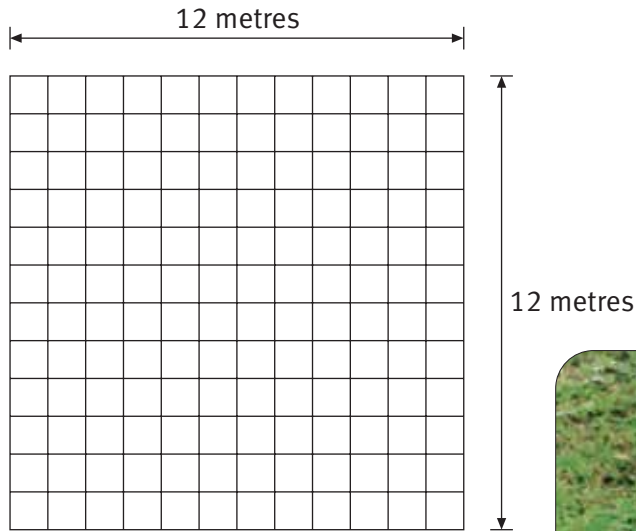


She runs out to the first marker, back to the starting line, out to the second marker, back to the starting line, and so on.

How many metres does she run in total?

**ACTIVITY THREE**

Paddy is a market gardener. He needs to buy some sprinklers to water his plants. He has a block of garden that is 12 metres by 12 metres.

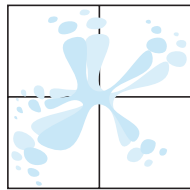


He can choose from these sprinklers at the garden shop:



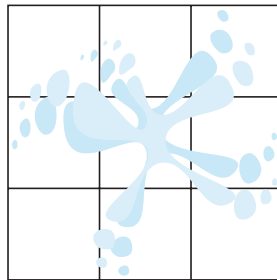
**WET WIMP**

(covers 1 m x 1 m)



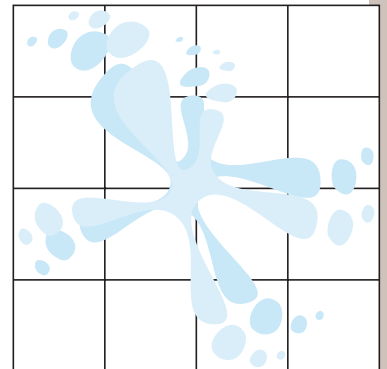
**So-soak**

(covers 2 m x 2 m)



**Deep Drench**

(covers 3 m x 3 m)



**Super Squirt**

(covers 4 m x 4 m)

Paddy wants to buy only one type of sprinkler.

What is the minimum number of sprinklers of each type that he would need?