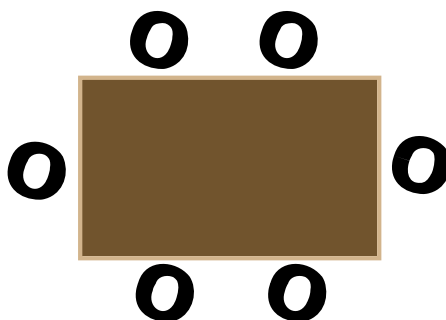


Street Party

For a street party,



there are rectangular tables which seat 6 people



The tables are being placed in a long line down the street, touching on their shorter sides.

How many tables will be needed for the 442 people coming to the party?

Work out an easy way for calculating the number of tables needed for different numbers of people.

Learning and Teaching Objectives

- Decide on the information you need to describe and continue the pattern
- Describe a rule of a pattern or relationship in symbols, words or pictures
- Use a rule to decide whether a given number will be in a sequence or not

Street Party Solution

Number of tables	1	2	3	4	5	6	7	8	9	10
Number of seats	6	10	14	18	22	26	30	34	38	42

There are 4 seats at each table with one on either end →

Number of seats = $4 \times \text{number of tables} + 2$

$$442 = 4 \times \text{tables} + 2$$

$$440 = 4 \times \text{tables}$$

$$110 = \text{number of tables needed}$$