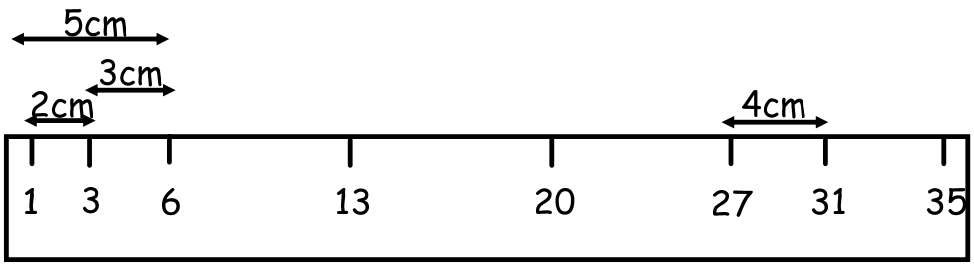
Measuring Tape

With the help of a tape measure,
make a paper strip 36cm long

Mark distances of 1, 3, 6, 13, 20, 27, 31 and 35 cm
from the end



The lengths 1cm, 2cm, 3cm, 4cm and 5cm can be measured
using this strip.

Investigate how many other lengths can be measured using
this strip

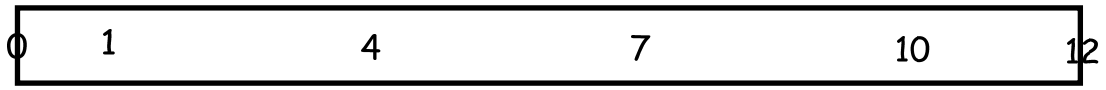
What is the least number of marks needed on a 12cm strip
so it can measure every whole number of cm from 1 to 12?

Learning and Teaching Objectives

- Use a systematic approach to solve the problem
- Choose and use a method of recording
- Use drawings or annotations to help visualise the problem
- Try other possibilities to check the solution

Measuring Tape Solution

1	2	3	4	5	6	7	8	9
1	1 → 3	3	27→ 31	1 → 6	6	6 → 13	27 → 35	27 → 36
10	11	12	13	14	15	16	17	18
3 → 13	20 → 31	1 → 13	13	6→ 20	20 → 35	20 → 36	3 → 20	13 → 31
19	20	21	22	23	24	25	26	27
1 → 20	20	6 → 27	13 → 35	13 → 36	3 → 27	6 → 31	1 → 27	27
28	29	30	31	32	33	34	35	36
3 → 31	6 → 35	1 → 31	31	3 → 35	3 → 36	1 → 35	35	36



A solution with 4 marks