

## Worked Example 9A

6 sensors are installed at an equal distance apart along a walkway.

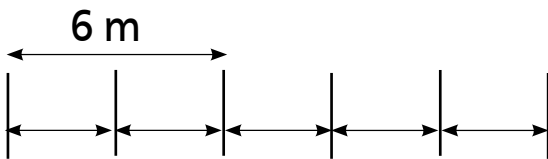
The distance between the 1st and the 3rd sensor is 6 m.

- How far apart is every 2 sensors?
- How far away is the 1st sensor from the last sensor?



We draw a diagram to visualise or picture the problem.

\*The number of sensors is 1 more than the number of gaps.



a) Number of gaps =  $3 - 1 = 2$

$$6 \text{ m} \div 2 = 3 \text{ m}$$

Every 2 sensors is 3 m apart.

b) Number of gaps =  $6 - 1 = 5$

$$5 \times 3 \text{ m} = 15 \text{ m}$$

The 1st sensor is 15 m away from the last sensor.