



17 Concept

Gaps and Intervals

1 The stretch of road leading to Cindy's house is to be planted with some trees at regular intervals of 15 m with trees planted at opposite ends of the road. If the road is 900 m long, how many trees are to be planted along that stretch of road?

2 Pine trees are planted at regular intervals of 5 m along a stretch of road with trees planted at opposite ends of the road. If the road is 150 m long, how many pine trees are planted along the road?

3 Lamp posts are placed at regular intervals of 30 m along a 1800-metre road. If the lamp posts are placed at opposite ends of the road, how many lamp posts are placed along the road?

Solutions:

1. number of intervals $\rightarrow 900 \text{ m} \div 15 \text{ m} = 60$
 $60 + 1 = 61$
61 trees are to be planted along that stretch of road.
2. number of intervals $\rightarrow 150 \text{ m} \div 5 \text{ m} = 30$
 $30 + 1 = 31$
31 pine trees are planted along the road.
3. number of intervals $\rightarrow 1800 \text{ m} \div 30 \text{ m} = 60$
 $60 + 1 = 61$
61 lamp posts are placed along the road.