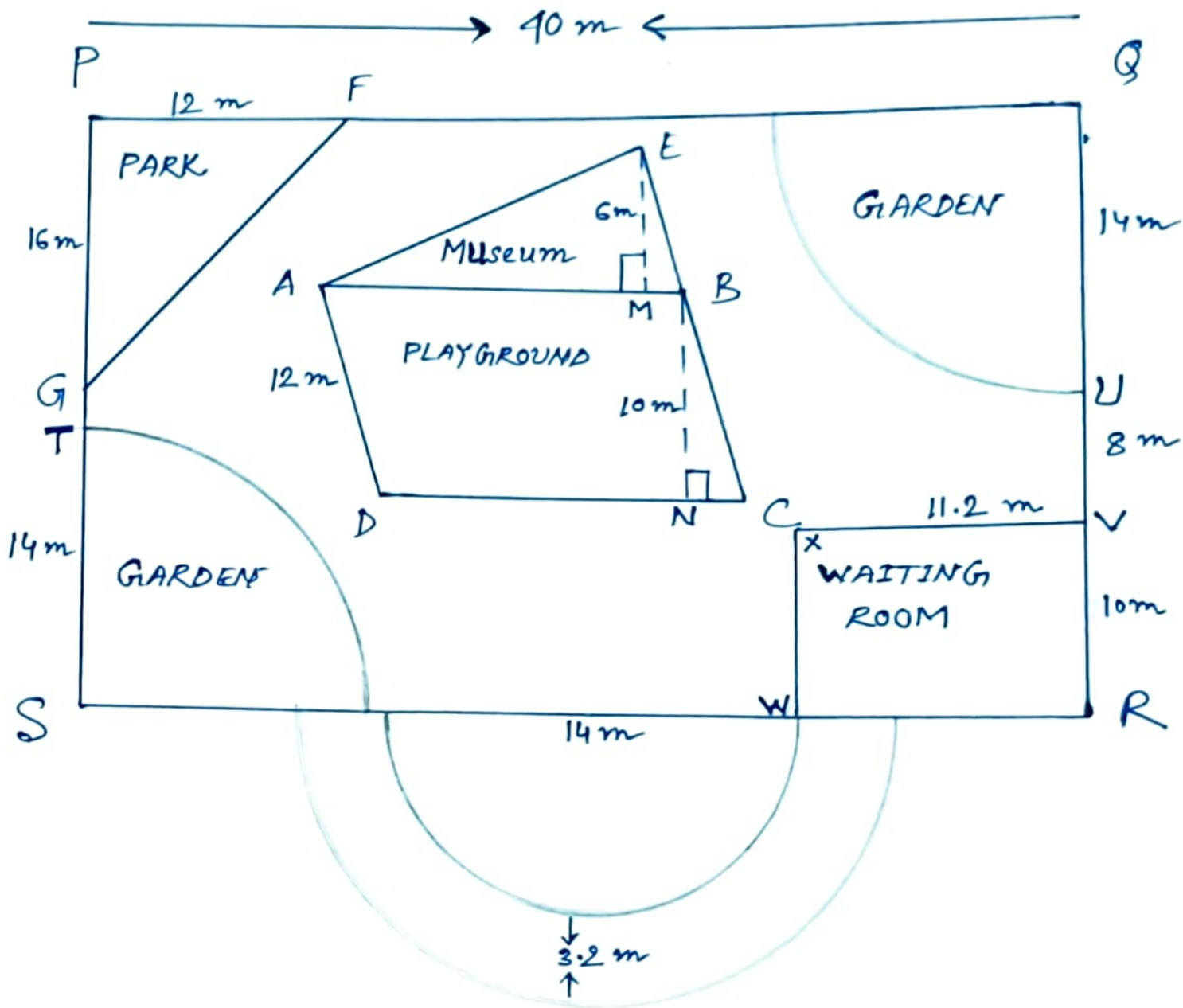


CASE STUDY

Sara, Rupsa, Ritam, Manali and Anupam go daily on morning walk in the city park. The city park is a rectangular park of dimension $40\text{m} \times 32\text{m}$. Inside the city park a triangular museum, a waiting room, a parallelogram shaped playground, a triangular park and gardens at the two corners are there.

One morning Ritam decided to water the gardens at the two corners and Anupam decided to plant grass into the playground. Sara and Manali have decided to do exercises in the triangular park whereas Rupsa will visit the museum.

After an hour they all will come to the waiting room to take rest for 20 minutes but to reach to the waiting room they all need to cross the path which is 3.2 m wide and surrounded by the semi-circular region of diameter 14 m . Area of the playground is 150 sq. m .



Q. 1. Find the region of the gardens to be watered by Ritam. (Take $\pi = \frac{22}{7}$)

Q 2. Find the base of the triangular museum which Rupsa visited.

Q 3. Calculate the area of the path of width 3.2 m which they all need to cross. (Take $\pi = \frac{22}{7}$)

Q 4. If Sara and Manali walk 3 rounds along the sides of the triangular park how much distance would they cover?

Q 5. Calculate the ^{total} area occupied by the playground and the triangular museum.

Q 6. Find the area of the rectangular city park excluding the museum, waiting room (rectangular), playground, triangular park and gardens at the two corners.