Module 3 SURVEYING

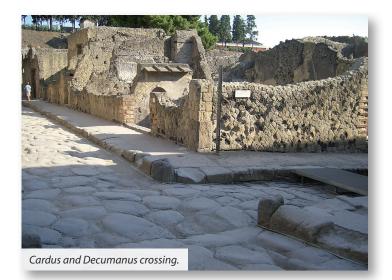
## SURVEYING AND TOWN PLANNING UNDER THE ROMAN EMPIRE

- a. Have you ever visited a town of Roman origin?
- b. Which one did you visit?
- c. What did you notice?

Roman engineering works are famous for their use of extremely careful measurements. Main roads followed straight lines, cities and fields were perfectly squared off. Their planning and construction projects show that these works were very complex to carry out, even with modern instruments. The Romans were excellent masters in surveying and town planning as it is shown in many cities in Italy and in Europe. The most evident feature of a city of ancient Roman origin is the "grid plan" of the roads. The grid plan was usually implemented in the Roman city planning. It is based originally on its use in military camps known as *castra*. The Roman grid is characterized by a nearly perfectly orthogonal layout of streets, all crossing each other at right angles, and by the presence of two main streets, set at right angles from each other and called *Cardo* and *Decumanus*.

A decumanus was an east-west-oriented road in a Roman city. The main decumanus was the *Decumanus Maximus*, which normally connected the Porta Praetoria (in a military camp, closest to the enemy) to the Porta Decumana (away from the enemy). In the middle, the Decumanus Maximus crossed the perpendicular *Cardo* or *Cardus Maximus*, the primary north-south road that was the usual main street. The Forum was normally located close to the intersection of the *Decumanus Maximus* and the Cardus Maximus. The Forum was the core of the Roman town, the main public square collecting all the political, social and economic affairs of the community.





One of the most evident examples of "grid plan" is the city plan of Torino, the ancient "Iulia Augusta Taurinorum", founded in the second half of the 1<sup>st</sup> century BC. The plan of the Roman part of the city reveals the typical organization of the Roman military camp with a quadrangular perimeter of about 760x720 m. The inner part was a geometric network of regular squared blocks (*insulae*) and was enclosed by defensive walls with high polygonal towers at the ends of the two main roads. In Great Britain the cities with a name ending in **"chester"** have Roman origins because it is the English evolution of the Latin word *castra* (Winchester, Chester, etc.).



## **1** Read the text again. In pairs, ask and answer these questions.

- 1. What are Roman engineering works famous for?
- 2. What were the characteristics of roads, cities and fields?
- 3. What is the most evident feature of a town of ancient Roman origin?
- 4. What was the "grid" based on?
- 5. What were the names of the two main roads?
- 6. Where was the Forum?
- 7. Why was it so important for the city life?
- 8. What does the city plan of Torino reveal?
- 9. What could be found at the ends of the two main roads?
- 10. What origin has the word "chester"?

## **2** Find other towns in Italy that have a "grid plan" and defensive walls.

Write a description including:

- the area or region where the town is;
- what can be still seen of the ancient plan;
- the current aspect of the city today.

