

## Reading a Topographic Map

Napoleon used his understanding of geography and maps to plan battles. Today, we can use topographic maps and computer models in the same way.

### Examine a Topographic Map

Topographic maps show the hills, valleys, water, and other physical features of an area. Water is shown in blue. The brown lines on a topographic map are contour lines.

### Read Contour Lines

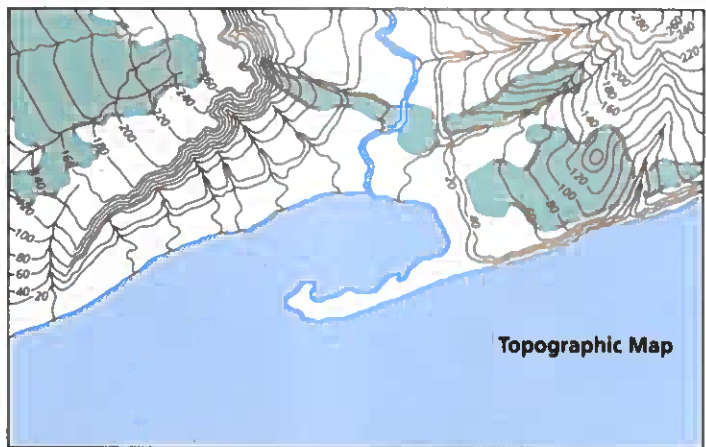
All locations on a single contour line have the same elevation (the height above a certain base level). The contour lines on a topographic map show you how high or low the land is and how steep the change in elevation is. Contour lines on a topographic map are farther apart where slopes are gradual and closer together where slopes are steep.

### Compare Map to Land

Compare Figure 8-8 with Figure 8-9 to locate the shore, the river, a steep slope, and a gentle slope.

#### Apply IT

- On the topographic map, identify the two highest areas. What is the elevation of each?
- Using the topographic map, identify
  - where a hill begins to rise sharply
  - a gradual slope



**FIGURE 8-8** Topographic maps show contour lines and the elevation for each contour line. On this topographic map, the contour line marked "20" indicates all locations that are at an elevation of 20 metres above sea level.



**FIGURE 8-9** This computer illustration shows the same land area as the topographic map.

- On the map and illustration, locate where you think would be ideal locations for the following:
  - a lookout, a surprise meeting, a challenging climb, and an easy downhill hike
  - where Napoleon would have commanders view their troops, and where he might create a trap for the enemy