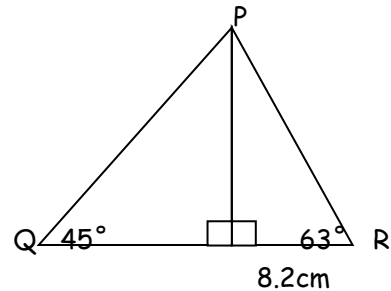


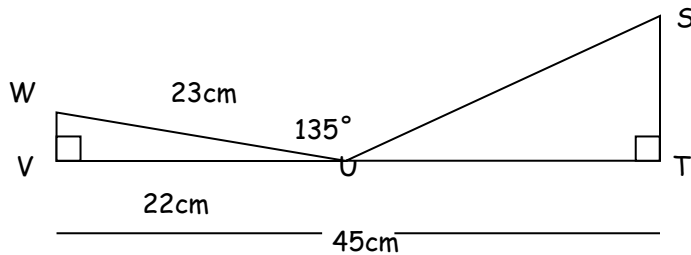
## 5.2 SOLVE PROBLEMS INVOLVING TWO RIGHT TRIANGLES

### Examples

- 1) Determine the length of side PQ, to the nearest tenth of a centimeter.



- 2) Determine the length of side ST.



- 3) A person standing on a balcony sights two people below standing directly in line with each other and the balcony. The angles of depression to the two people are  $48^\circ$  and  $25^\circ$ . How far apart are the two people on the ground? Round your answer to two decimal places.
- 4) A video camera is situated at the top of a 21m tower. Two individuals are standing on either side of the tower. The camera sites person A at an angle of declination of  $42^\circ$  and sites person B at an angle of declination of  $38^\circ$ . How far apart are the two individuals?