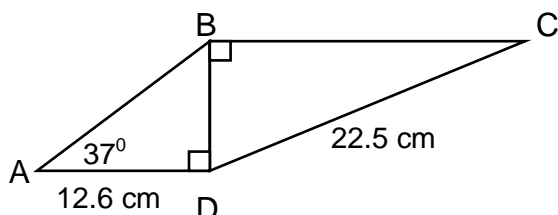
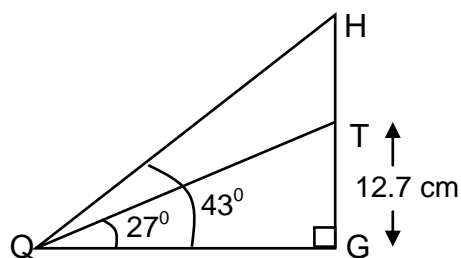


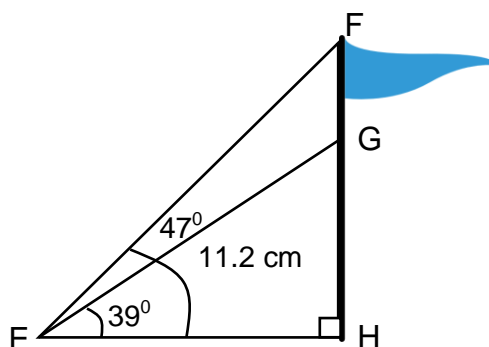
1. Find the measure of  $\angle C$  to the nearest degree.



2. The angle of elevation of the top of a tree, T, is  $27^\circ$ . From the same point on the ground, the angle of elevation of a hawk, H, flying directly above the tree is  $43^\circ$ . The tree is 12.7m tall. How high in the hawk above the ground, to the nearest tenth?



3. Two guy wires support a flagpole, FH. The first wire is 11.2m long and has an angle of inclination of  $39^\circ$ . The second wire has an angle of inclination of  $47^\circ$ . How tall is the flagpole to the nearest tenth?



4. A mountain climber is on top of a mountain 680 m high. The angles of depression of two points on opposite sides of the mountain are  $48^\circ$  and  $32^\circ$ . How long would a tunnel be that runs between the two points, to the nearest meter?

