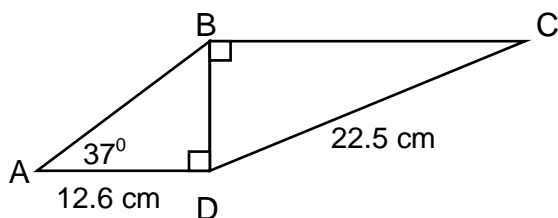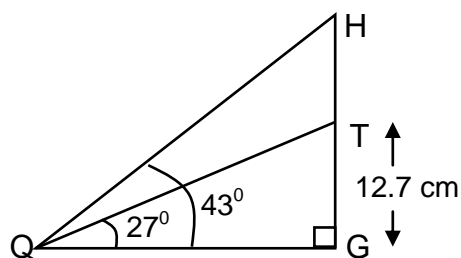1. Find the measure of $\angle C$ to the nearest degree.
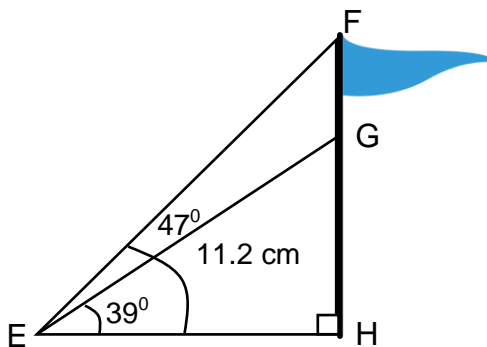

$\angle C= 25^0$

2. The angle of elevation of the top of a tree, T, is 27^0.
    From the same point on the ground, the angle of
    elevation of a hawk, H, flying directly above the tree
    is 43^0.   The tree is 12.7m tall. How high in the hawk
    above the ground, to the nearest tenth?

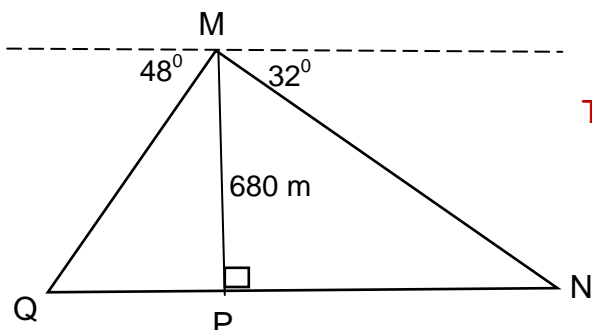

    The height of the hawk above ground, HG = 23.2 m

3. Two guy wires support a flagpole, FH.
    The first wire is 11.2m long and has an
    angle of inclination of 39^0. The second
    wire has an angle of inclination of 47^0.
    How tall is the flagpole to the nearest tenth?

    The flagpole, FH = 9.3 m

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 48^0 and 32^0. How long would a
    tunnel be that runs between the two points, to the nearest meter?

The length of a tunnel that runs from QN = 1700.5 m